Montana Outdoors

November/Dece[illegible]er 2003

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ELK KNOW NO BOUNDARIES

What that means to ranchers (and hunters)

"WAIDMANN'S HEIL!"

Do Germans know something about hunting that we don't?

LEWIS AND CLARK SLEPT HERE

Tracing the Corps through Montana's state parks

Free! 2004 Calendar Inside

LITTLE QUACKER Giving youngsters a place to hunt in the future is one goal of FWP's Block Management Program, featured in our photo essay on page 30. Photo by Dale C. Spartas

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CONTENTS

Montana Outdoors

November/December 2003

FREE CALENDAR INSIDE!

As a special gift to our readers, we've included in this issue a free 2004 calendar featuring Montana's uncommon critters. Use it yourself, or pass it on to a youngster interested in Montana's great outdoors.
—*Editor*

Features

8 The Elk Next Door
Why one person's prized (or profitable) elk can become another person's elk depredation problem. *By Tom Dickson*

14 A Montana Hunter in Bavaria
Could the highly successful German system of hunting and wildlife management offer insight into sustaining a hunting culture in the increasingly urbanized Treasure State? *By James Hagengruber*

20 My Brown Boy
Sunlight, magic, and pantherlike screams on the frozen plains of north-central Montana. *By Rick Bass. Illustrations by Stan Fellows*

24 Tracing Lewis and Clark Through Montana's State Parks
At these historic state sites, visitors can see what the expedition members saw and learn what further adventures awaited them around the bend. *By Ellen Baumler*

30 A Place to Hunt
A photographer's tribute to Montana's Block Management Program. *By Dale C. Spartas*

Departments

4 LETTERS

5 NATURAL WONDERS

5 OUR POINT OF VIEW
Hunting for Different Reasons

6 OUTDOORS REPORT

19 OUT HERE
Incoming

34 BOOK REVIEWS

36 2003 *MONTANA OUTDOORS* INDEX

37 OUTDOORS PORTRAIT
White-tailed Ptarmigan

38 PARTING SHOT
Gotcha!

COVER PHOTO Elegant monarch or eating machine? Decide for yourself after reading our story starting on page 8. Photo by Denver Bryan.

LETTERS

Appreciate the balance

For over 26 years, we have been devoted readers of *Montana Outdoors* and are very pleased with the new look and content. We especially appreciate that both sides of an issue are presented, whether it's from a rancher or recreationist, politician or citizen, industry representative or wilderness advocate. It is enlightening to be informed from both sides of an issue with fair representation by the magazine.

Larry and Camille Eisenman
Missoula, MT

And we agree

Your July/August issue was the very best in a long time.

Betty Rita White
Miles City, MT

The river crowding issue

Congratulations on the fine article titled "Cross Currents" (July/August). As a nonresident fisherman in Montana for 20 years from 1978 to 1999, I observed many of the issues you discuss in the article. In particular, I observed a decline in the Yellowstone River fishery upstream from Livingston as it became overrun and overfished by drift boat fishermen.

In 1999, after a month of mediocre fishing along the Yellowstone and other rivers in Montana, I decided I'd help with the overcrowding problem by spending my trout fishing time and money in another state. But already I can see some of the same overcrowding and access problems starting to rear their ugly heads there, too.

I see no easy answers to the overcrowding and overfishing issues. If Montana decides to restrict the number of float trips, then it risks losing money spent by nonresidents. But if the state

doesn't put in some restrictions, you'll eventually lose fishermen like myself who don't want overcrowding or mediocre fishing.

Perhaps one answer would be to restrict float trips while improving wade fishing access through private property using something like the Block Management Program you have for hunting.

Don J. Dorr
League City, TX

Regarding the issues raised in your "Cross Currents" article: What we need to address these many river recreation issues are solutions and positive actions to implement them. Here are my suggestions:

- Divide rivers into sections where enthusiasts of certain activities could pursue their interests unobstructed by other groups. For example, outfitters could use catch-and-release stretches but not other sections where bait fishermen may be trying to catch dinner.
- Limit the number of daily launches on more rivers, as is done on the Smith River.
- Make nonresident anglers apply for a limited number of licenses, as is done for hunting licenses.

Jim Batley
Cascade, MT

Fresh meat stopped the slaughter

I enjoyed Sam Curtis's article "Wildlife Management Demystified" in the September/October issue. However, I am not sure he totally understands why wildlife populations dropped so precipitously from the 1850s to the turn of the century.

True, game hunting during this time was excessive, and the buffalo were all but wiped out. However, this was also a time of great expansion by Americans moving west (at the expense of Native Americans). Dry goods were fairly plentiful, but fresh meat was hard to obtain except by hunting. Thus, hundreds of thousands of families were supplementing their diets with wild game. This severely impacted game stocks and the predators that fed upon them. By the turn of the century, however, our transportation infrastructure began to catch up with this expansion, and fresh meat became more readily available. The frontier was changing from subsistence living to consumptive living, and game herds began to recover rapidly. I say rapidly because their natural predators were still seen as a threat to livestock and were hunted to near extinction.

Edward A. Johnson
Butte, MT

Day in court

Regarding the short article on the hunting lawsuit in Arizona ("Montana Outdoors Report," July/August) in which nonresident hunters have challenged Arizona's right to charge substantially higher nonresident hunting license fees and limit nonresidents to just 10 percent of the available deer and elk tags:

It is gratifying to see nonresident hunters, who have endured long-standing bias by most western states, have their day in court, hopefully the first of many.

I own a half-section in Montana that has excellent mule deer hunting. There is no way for me, as a nonresident, to obtain a deer tag other than through the general drawing, which has rather poor odds. Yet a Montana resident can go to the store, buy a deer tag for $13, and hunt on my property. How biased is that?

The days of unfair treatment toward nonresident hunters by Montana, Arizona, and several other western states may be in for a long overdue change. Western wildlife agencies would be well advised to address these issues proactively rather than wait for the chaos caused by litigation losses.

Eric R. Shields
Morris, NY

Editor replies: *No hunter, whether a resident or a nonresident, may legally hunt on your property without your permission.*

TOM DICKSON

"Yes, I'm aware what night this is. Just one more fish and we'll get going."

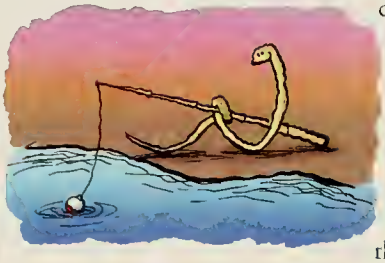
Q. *What's the difference between a grizzly bear and a Kodiak bear?*

A. Both grizzly and Kodiak are names given to brown bears, which are found throughout northern Europe and Asia as well as North America, says Mike Madel, FWP bear biologist. The Kodiak is the common name for the brown bear subspecies found off the Alaskan coast on Kodiak, Afognak, and Shuyak islands. Grizzlies are inland brown bears. Brown bears that live along the Pacific coast are called coastal brown bears. Kodiak and coastal brown bears weigh roughly one-third more than their inland cousins.

ILLUSTRATIONS BY JEFF TOLBERT

Q. *How does the hunting permit bonus point system work?*

A. Hunters may pay an extra $2 (nonresidents pay $20) on their license application for bonus points in the moose, goat, sheep, elk, deer, and antelope permit drawings. The bonus points give hunters another "chip in the drawing," so that their name is entered into the lottery twice. The points for unsuccessful applicants build year after year, giving them additional chances in future drawings.



Q. *Twice in July while fishing, I saw a garter snake with a live sculpin in its jaws. Is it common for land-based snakes to enter the water to catch fish or other prey?*

A. The answer is yes for Monrana's racer snakes, garter snakes, and ribbon snakes, says Walt Timmerman, a herpetologist and the Recreation Bureau chief with the FWP Parks Division. However, prairie rattlesnakes, bull snakes, and rubber boas "wouldn't be caught dead eating fish," he says. Timmerman adds, "It's rare for anyone to see a snake eating anything in the wild, so a person who sees that twice in one month is extremely lucky."

? *Wonder about some part of Montana's natural world? E-mail us at: tdickson@state.mt.us*

OUR POINT OF VIEW

JEFF HAGENER | *Director of Montana Fish, Wildlife & Parks*

Hunting for different reasons

Maybe I'm just getting old (my kids tell me so, though I haven't yet been willing to concede that point). Like so many hunters I've met while being FWP director, I still have a strong passion for hunting. But lately I've been less interested in bagging an animal and more interested in just getting close enough to take a shot, or advising someone else on a stalk, rather than actually squeezing the trigger or releasing the arrow.

It's not that I've entirely lost my predatory instinct. I still bring home enough birds and venison to keep the freezer stocked through the year. And I still want to shoot a moose. That's the one big game permit I've never drawn, though I've been trying for more than 20 years.

Also, I wouldn't mind having a second chance at a few animals I've missed over the years. I still remember when, in 1981, I was bowhunting mountain goats with my brother in the South Big Hole Valley. We'd seen two billies along a talus slope and made about a three-hour stalk to where we could get close enough. I was about 25 yards away from one, but he was facing me, head down, and I really couldn't make a good shot. Finally he lifted his head, and I aimed right at the base of his neck so that the arrow would pierce his vitals. But then, just as I released the arrow, he dipped his head and the arrow hit a horn and bounced off onto some rocks. The metal clang sent them running, and that was it.

Except for those missed opportunities, I seem to be more and more content just to be out in the forest or walking the prairie and seeing wildlife, especially if I can get close to an animal. That's one reason I like bowhunting elk so much. It's not the easiest way to get an elk, but the thrill of calling in a rutting bull is tough to beat. I've had times when I'm among three or four bulls, and they're all bugling back and forth and I can hear them thrashing in the brush, sometimes just a few yards away.

I get the same thrill from rattling in a buck. I hunt whitetails from a tree stand in the Blackfoot River country, and by rattling antlers during the rut I've been able to bring in some big deer to within 15 yards.

Spring turkey hunting holds a similar appeal. When a tom gobbles, you try to convince him with some yelps that you're a hen. There are few things as exciting as when a gobbler slowly approaches your hiding spot, puffed out in full strut, gobbling his head off. Once I experience that, I really don't need to shoot the bird to have a rewarding hunt.

Montana Fish, Wildlife & Parks

I've been hunting since I was a boy, for about 35 years, and I guess that over the years your priorities shift. Bagging a trophy used to be the biggest thing. Now it's more just the stalk, the time outdoors, and being out with younger hunters. Maybe the reason bagging an animal has less appeal than it once had is that I've gotten wiser and more philosophical about the experience.

Then again, when you consider what a mature deer or elk weighs, it could be I'm just getting too old to haul it back to the truck.

Have a safe and successful season.

M. Jeff Hagener

New law eliminates residents' state park entrance fees.

It's amazing someone didn't think of it sooner.

A new law passed by the Montana legislature eliminates daily and annual state park fees for Montana residents starting in 2004. Instead, revenue to operate, maintain, and improve state parks will come from an optional $4 added to vehicle registrations.

State park officials say the new funding mechanism, the first of its kind in any state, will make Montana state parks affordable for all residents and will generate more funds to make the park system an even better showcase of sites such as Bannack, Ulm Pishkun, Travelers' Rest, and Lewis and Clark Caverns.

PARK PASS Starting in 2004, vehicles with Montana plates can enter state parks at no charge.

"Pretty much everyone wins with this deal," says FWP State Parks Division administrator Doug Monger. "More people will be able to visit state parks, and the parks will be in better shape."

According to Monger, the state park system was facing huge maintenance backlogs and the possibility of closing some parks and laying off staff.

"Things were pretty bleak going into the 2003 legislative session," he says.

The new funding source option was recommended to the legislature by the State Park Futures Committee, composed of several tourism business owners and state lawmakers. The annual $4 addition to vehicle registration fees eliminates the daily entrance fee and $30 annual pass fee for residents. Vehicles with Montana license plates and visitors on foot will be allowed into all state parks at no charge. Camping fees and other special fees will still be required, and nonresidents will continue to pay daily or annual entrance fees, Monger says.

He adds that the legislation received widespread support because the $4 fee is not mandatory. "If you don't use state parks or fishing access sites, tell the county clerk when you pay for your annual vehicle registration and you won't have to pay the $4," he says.

Few people will likely pursue that option. Surveys show that 82 percent of Montanans have visited a state park in the past two years. Of the remaining 18 percent, many have visited fishing access sites, which are purchased and maintained by FWP's Parks Division.

Monger says he hopes Montanans will take advantage of the low fee to explore more of the state's 42 parks and 320 fishing access sites.

"What we're really excited about is that this will help get more school kids and families to state parks," he says. "When you look at what the parks offer—homesteads, gold rush ghost towns, sacred Indian sites, battlefields—you can't help but want people to see and experience firsthand these incredible cultural treasures."

Do the State Park TWIST

Fun things you never expected to do in Montana state parks

Skate with the Spirits

Bannack State Park is best known as one of the West's best ghost towns, but it's also a place to practice your triple toe loop. A pond in the park is flooded each winter and turned into an ice rink on weekends. A warming house, hot drinks, and outdoor bonfires ease the chill. Skate rental is free. The rink opens December 26 (if there is ice). For hours and more information, call the park at (406) 834-3413.

ANGELA HURLEY

Kalispell hunter education takes to the field

Thirty-two young graduates of the FWP hunter education course put their newly learned skills to the test on September 13 at a local shooting club in Kalispell. Sponsored by community sports groups, gun dog clubs, and businesses, the outing provided the young hunters an opportunity to practice safety lessons, see hunting dogs work, and shoot live bobwhite quail released for the event.

"This gives hunter education graduates a chance to get out in the field and practice what they learned," says John Fraley, FWP northwestern region information officer in Kalispell. "It's one thing to read and hear about hunter safety and wingshooting in the classroom, but it's something altogether different to actually get out and do it."

JOHN FRALEY

A young hunter approaches hiding quail while under the supervision of a hunter safety instructor.

The hunter education graduates, ages 12 to 14, began the day shooting clay pigeons and then met with safety instructors and hunting dog handlers. Twenty-five of the one hundred bobwhite quail released for the outing were eventually shot by the young hunters. A volunteer chef was on hand to panfry the birds after they were cleaned and plucked.

"The kids had a great time, and we were all impressed with how safety conscious they were," says Fraley.

Experts say no ice is safe

The drowning of a nine-year-old girl who fell through the ice at Spring Meadow Lake State Park in Helena last winter has renewed warnings by state officials about ice safety.

"The bottom line is that no ice is 100 percent safe," says Wendy Kamm, FWP game warden at Fort Benton.

National ice safety experts say that the minimum ice thickness for foot travel is 4 inches, and that ice should be at least one foot thick to support a medium-sized pickup. Even at that thickness, Kamm warns, ice can be rotten, cracked, or otherwise unable to hold heavy loads.

To test ice for thickness, use an ice chisel or auger. If the ice is thinner than the guidelines shown below, stay on shore.

"I don't care how good they're saying the ice fishing is out there," says Kamm. "It's not worth dying for."

Kamm and other ice safety experts recommend that people traveling on ice wear a life vest and carry two ice awls (or even old screwdrivers) attached with a tether around their neck.

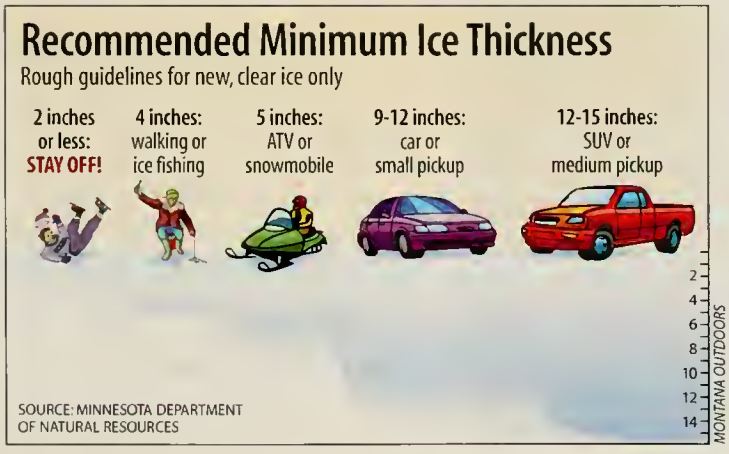
"Don't carry them in your pocket," says Kamm. "They need to be out and accessible."

TOM DICKSON

Though 16 inches thick, the ice on this lake could have weak spots where trucks, snowmobiles, and even anglers could break through.

If you do fall through the ice, don't panic. Place your hands and arms on the unbroken ice surface and kick your feet while pulling yourself up with the awls and sliding forward like a seal. Once you are lying on the ice, roll away from the hole. That spreads your weight out until you are on solid ice. Then immediately get dry and warm, before hypothermia sets in.

If a companion falls through, don't run to the hole. Use something on shore—like skis, a long tree branch, or jumper cables—to toss out to your companion, who can then be pulled onto solid ice. If that doesn't work, call 911.



Researchers capture common loons to monitor population

On a warm night in July, a boat glided quietly across Seeley Lake, 30 miles northeast of Missoula, and approached a dark form on the water mesmerized by a large spotlight. A volunteer readied a large, soft-mesh capture net and then scooped the female common loon up and into the boat. A few minutes later, a male was captured in similar fashion. Once on shore, volunteers placed soft towels over the loons' heads to calm the nervous birds. Speaking in low, quiet voices, they weighed and measured the loons, took blood and feather samples, and then fitted the birds with leg bands indicating their individual identity, age, gender, and place of capture. The loons, which weighed about 9 pounds, were then gently released back into the water.

MONTANA FWP

A young loon, measured and banded but otherwise unharmed, is readied for release.

How are these and other common loons faring in the face of increased shoreline development and boating on the lakes where they breed? Right now, no one knows, but coordinators of an ambitious new loon monitoring study hope to change that.

"Monitoring populations is a requirement in all wildlife management, including loon management," says Gael Bissell, FWP wildlife biologist in Kalispell. "We need to know if the state's loon population is going up, down, or remaining stable."

Knowing how the population is faring will help biologists better understand what they need to do to maintain or improve loon nesting habitat.

The study began in July 2003, when teams of biologists and volunteers captured and banded 32 common loons in northwestern Montana lakes. Ongoing monitoring of those banded loons over the next three years will provide researchers with essential information about loon behavior, recruitment, migration patterns, and mortality.

The research project is being funded with state and federal grants.

Lynn Kelly, president of the Montana Loon Society, says the roughly 200 loons that live in Montana are vulnerable because loons don't breed until age seven and lay only two eggs.

"It wouldn't take much to knock this population down to where it might not be able to recover," she says.

In addition to increased lake use and development, Kelly says Montana's loons face threats from lead sinkers and mercury poisoning.

"We're trying to ensure these birds remain part of Montana's natural landscape 100 years from now," Kelly says.

The Elk NEXT DOOR

Why one person's prized (or profitable) elk can become another person's elk depredation problem

BY TOM DICKSON

It was the biggest elk Jay Newell had ever shot. But there were no cheers, no pats on the back, only the sound of *swish, swish, swish* from pivot irrigators as the FWP wildlife biologist walked past the rows of corn over to the dead bull. The majestic animal, which Newell estimated at more than 1,000 pounds, had been killed not in an ordinary hunt but as part of a game damage control measure. It was 3 a.m.

Throughout that night in late August 2002, Newell and a hired contractor had driven around and around the irrigated fields, 25 miles east of Billings in the Yellowstone River valley. They chased elk away from rows of corn, beets, and alfalfa where the animals had been gorging for weeks. During the day, the elk bedded in the forested Pine Ridge hills to the south, then headed down to the lush, irrigated crop fields after dark.

FWP had tried scaring the elk with cracker shells, but the animals soon returned. Then the department hired a herder to drive the fields throughout the night, often accompanied by a game warden or other FWP staff member. Though that helped some, "it became obvious that removing the elk was the only option," Newell says.

The previous year landowner Steve Sian had tried, allowing dozens of local hunters onto his property. But the corn was so tall, and most of the elk came out only at night, that only four animals were shot. Even more frustrating, says Newell, was that nearby ranches in the Pine Ridge hills allowed either no or very little public hunting. That created elk refuges, where the animals were safe during the hunting season, only to head back to Sian's afterwards.

Finally, over a two-week period in late summer 2002, FWP was forced to use special elk kill permits to shoot a total of 15 elk on Sian's and a neighbor's property.

"At that point, we'd exhausted every other option," says Newell.

According to Sian, the FWP sharpshooters saved his financial skin. "I was losing about 15 percent of my crop each year," he says, estimating the loss at $4,000 to $8,000 annually. "If they hadn't taken out those elk, I don't know what I would have done."

The culling operation was conducted legally and as safely as possible, and the meat was donated to local food-sharing agencies, but not everyone was pleased by the elk removal effort. Adjacent landowners criticized the agency for killing the bulls, and local hunters complained they should have been given more shooting opportunities.

"It wasn't," says Newell, "what you'd call an ideal situation."

Killing elk with sharpshooters is not how FWP wants to manage elk. Ideally, the department uses public hunting to keep elk numbers down where necessary. Yet, as happened in the Pine Ridge area and increasingly in other parts of Montana, wildlife managers are forced to find new ways to control the large ungulates. As elk numbers have risen

MICHAEL H. FRANCIS

TROPHY OR TROUBLE? What hunters see as a prized big game animal, many ranchers see as a year-round eating machine.

KERRY T. MCNOTT

EMBARRASSMENT OF RICHES "When it comes to managing elk, we're moving from an era of restoration to an era of abundance," says one senior FWP official. "For decades, we worked to bring elk back from the brink of extinction, and most people were pretty much on board with that. But now, with too many elk in some places, there's no longer a unified vision of elk management. And we as a department aren't prepared for that."

beyond department goals in more than half the state's elk management units, tolerance by many landowners for elk depredation is declining. Compounding the problem are landowners who restrict hunting access.

"When landowners don't allow public hunting, or limit it to such an extent that we can't get an adequate harvest," says Pat Flowers, FWP southwestern region supervisor, "it becomes almost impossible to keep herds at acceptable levels."

A MATTER OF PERSPECTIVE

One reason elk management has become so difficult is that Montanans disagree over the nature of the problem. Some landowners, happy to have abundant elk on their land—either for aesthetic reasons or so they can sell access to hunters—maintain there is no elk problem: The more, the merrier. But that's not the case for nearby ranchers losing crops to what they maintain are too many elk. Meanwhile, hunters see the problem as not enough elk (especially bulls) and not enough hunting access. And many FWP officials maintain that the issue really isn't so much about elk numbers and damage as it is about elk "distribution."

What no one disputes is that all aspects of elk management are closely connected.

"It's next to impossible for a rancher or an FWP biologist to make a decision regarding elk or public hunting access that doesn't affect others," says Chase Hibbard, a central Montana rancher and former state legislator. "For example, if one rancher outfits and only shoots bulls but not cows, then he could cause a growing winter elk population on surrounding ranches. What one party does affects others."

That's true on public land, too. Elk hunters and ranchers argue over allotments that allow private cattle to graze on national forests. Hunters contend that livestock eat grass and shrubs that elk need to survive. Ranchers say they have legal grazing contracts and in some cases are even demanding that FWP decrease elk numbers in national forests so more forage is available for cattle.

Montana isn't alone in its struggle to manage elk depredation. Conservation officials in other western states say elk issues are among the most time-consuming and contentious they face. In May, a New Mexico ranch manager enraged conservationists and elk hunters nationwide when he shot 20 elk that, he maintained, competed with the ranch's cattle for grass.

The stakes of the elk damage issue in Montana are high. In recent years, legislators and others have put forth dozens of proposals to address elk-related problems. Among the most controversial are compensation programs that would cost FWP money it says would be better spent on reducing elk damage. Other proposals would give landowners elk permits they could then sell, which raises the divisive issue of increased private profit from public wildlife.

RESTORING THE HERD

For Joe Greaves, enough was enough. Elk were feeding on his wheat crop southeast of Townsend, in the Big Belt Mountain foothills, as they had been for several years. Poor harvests had been sinking the Broadwater County rancher deeper in debt, and the elk were the last straw. So he shot one and dressed it out; then, a few days later, he shot three more.

That was in 1937. The resulting trial, in which Greaves was acquitted of illegally shooting protected game animals, set the stage for state laws requiring FWP to help landowners suffering losses from big game. (Three years later, however, the Montana Supreme Court ruled that landowners must accept "some injury to property or inconvenience from wild game for which there is no recourse.")

The elk vexing Greaves had been transplanted to the area as part of an ambitious conservation effort to restore elk numbers throughout the West. Before European settlement, elk roamed across much of what is today Montana. But by the early 1900s, unregulated market and subsistence hunting had reduced the population to just a few small, scattered herds along the Continental Divide and in the newly established Yellowstone National Park.

Montana began transplanting elk from the park in 1910, and by 1940 the state's elk population was estimated at roughly 22,000. Since then, due to improved habitat, natural expansion, and regulated harvest, that number has grown to about 150,000 animals.

As the Greaves case shows, elk and ranchers have had an uneasy relationship for decades. Averaging 550 pounds each, mature elk will often feed on haystacks in winter, and in spring they can eat early season grasses needed by cattle. In summer and fall, many move into standing crops. Elk also knock down fences, allowing cattle to escape and causing time-consuming repairs.

But until recently, most elk damage problems had been adequately worked out among FWP wildlife managers, landowners, and hunters. Using public hunting, the department increases the antlerless (cow and calf) elk harvest where herds are too populous, thus reducing the number of reproducing animals. Conversely, when a herd gets too small, the department decreases the number of antlerless elk that hunters may shoot, thus allowing the herd to grow.

For years, this system worked to keep elk at tolerable levels. But then, in many parts of the state, it began to unravel.

JEFF HENRY/ICHEJAUNE PICTURES

LOCKED OUT Each year, more and more private land in Montana is closed to free public hunting. Landowners are either leasing their property to outfitters or groups of hunters, charging access fees, or simply shutting hunters out due to philosophical reasons or safety, privacy, or nuisance concerns.

Whatever the reason, the locked land then becomes an elk refuge, where the animals hide out until hunting season ends. Then those elk, their numbers undiminished, roam widely, eating haystacks set aside for horses and cattle, early season forage, and crops of alfalfa, soybeans, and corn later in the year.

HUNTERS CAN'T GET TO THE ELK

One factor leading to more elk damage complaints has been a recent string of mild winters. It takes snow to move elk from high-country summer range down to foothills and valley bottoms where hunters can get to the wary animals. Even though FWP has increased the number of antlerless permits in many areas, the weather hasn't cooperated to produce an increased harvest.

Another factor is the growing number of rural subdivisions. Closed to hunting, the new housing developments and ranchettes create elk refuges. They also fragment habitat. The problem is expected to worsen as ranchers succumb to lucrative offers from developers. John Crumley, a long-time Madison Valley rancher, says he's alarmed at how many of his neighbors have sold land to developers. "I look out at pasture my family used to lease and think, 'They wouldn't build there,'" he says, "and again and again I'm proven wrong."

Many ranchers, and even FWP biologists and managers, say the department also shares responsibility for the growing elk controversies. "In much of Montana, we've been reluctant to knock down elk numbers," says Ken Hamlin, a senior wildlife biologist at Bozeman. He explains that for decades, biologists have been restoring elk to areas the animals once inhabited. "We want to provide more elk for hunters, and we know the habitat can handle more, so that's what we've done," Hamlin says. "Then, when we tried to reduce numbers, we got beaten up by hunting groups."

But the biggest obstacle preventing FWP from more successfully managing elk, say Hamlin and other wildlife biologists, is the continual decline in free public hunting access to private land. More landowners are charging to hunt elk on their property, often to supplement declining ranch or farm profits. Fees range from $150 for access to more than $5,000 for an outfitted trophy bull hunt. Another reason is the growing number of what FWP calls "nontraditional" landowners (those who don't depend on farming or ranching income), who often oppose pub-

Tom Dickson is editor of Montana Outdoors.

TIM EGAN

lic hunting on their land for philosophical, nuisance, privacy, or safety reasons.

Says one large landowner who moved to Montana recently from the West Coast, "It's pretty easy to get disgusted by the trespass, illegal shooting, and other aspects of public hunting on your property."

To make matters more difficult, elk are notoriously difficult to manage even when hunters do have access to private property. The animals are prolific, elusive, intelligent, and durable. They also can roam for miles each day, across political and legal boundaries, making them tough for hunters and wildlife managers to find and control.

FAIR TO PAY?

If FWP can't keep elk numbers down to tolerable levels, say a small but growing number of ranchers, landowners should be compensated for their losses with cash or elk licenses they can sell to hunters and outfitters.

That wouldn't be legal, workable, or effective, argues FWP. The state supreme court has ruled twice that landowners must accept a certain amount of depredation. "And it's sometimes impossible to determine just how much damage is from elk or from other factors," says Graham Taylor, FWP regional wildlife manager at Great Falls. Add to that the fact that compensation doesn't do anything to reduce elk numbers or damage.

Moreover, say sportsmen groups, selling licenses would allow a select few to benefit financially from the public's wildlife. That would result in fewer public hunting opportunities and, as a result, less public support for wildlife conservation.

"We want to see ranchers succeed economically," says Craig Sharpe, executive director of the Montana Wildlife Federation. "But cash payments and selling licenses aren't fair to the hunters who would foot the bill. There are more effective ways to deal with the problem."

In fact, say FWP officials, many elk damage problems are being handled quickly and effectively. Department wardens and biologists respond to every depredation complaint, meeting with landowners to identify the problems and discuss options for reducing damage. FWP employees use cracker shells and propane cannons to scare elk, hire herders and fly helicopters to move the animals, provide materials for fencing haystacks, and give advice on erecting electric fences around fields.

Recently, FWP was authorized by the Montana legislature to spend more money on technical assistance—such as providing advice on crop storage, grazing systems, and fence design—to help landowners reduce elk depredation problems.

By state law, FWP depredation management assistance is only available to landowners who allow public hunting. That's because "wildlife is in the public trust," says Don Childress, head of FWP's Wildlife Division. "We try to maintain the tradition of public hunting so we don't end up like Texas, where everyone has to pay to hunt on private land."

Equally important is the fact that the most effective way to lessen crop and pasture damage is for public hunters to reduce the number of troublesome elk. That's why wildlife managers issue more hunting permits where elk numbers get too high. They also issue special antlerless (A7) permits so additional cow elk can be shot on private land where game damage is particularly severe.

> "We try to maintain the tradition of public hunting so we don't end up like Texas, where everyone has to pay to hunt on private land."
>
> —Don Childress, *FWP Wildlife Division Administrator*

Beginning this fall, for the first time in Montana, some hunters will be authorized to shoot a second antlerless elk. These new licenses (A9) will be used in hunting districts, mostly in the southwest, where elk population growth has been outpacing hunter harvest.

GROUPS THAT WORK

Despite these management efforts, elk numbers will continue to grow—and with them damage complaints—unless neighboring landowners can reach some agreement on how many elk are acceptable and how best to use public hunting to achieve those goals. That's happening in a few spots around the state, and often it's not the department but rather landowners who are taking the lead.

GARY LEPPHART

DAVE SHARPE

POPULATION CONTROL Given good habitat and little hunting pressure, elk populations grow rapidly. That's been the case in more than half of Montana's elk management units, where mild winters and a lack of hunting access have combined to nudge elk populations higher than where FWP wants them. The wide-roaming animals then disperse to ranches, farms, and even subdivisions, increasing the number of damage complaints.

In 1996, seven Madison Valley ranchers got together to talk about the continual loss of local ranchlands to development, growing weed infestations, and other chronic problems. One that came up repeatedly was elk, which were causing headaches for some ranchers whose neighbors allowed no hunting. The Madison Valley Ranchlands Group, as the members called themselves, decided to invite all the area landowners and local FWP staff in to discuss the issue.

The group came up with a proposal, which the FWP Commission approved, to hire a coordinator who directs hunters to where landowners are seeing elk. "The working group deals with hunters so the landowners who don't want to don't have to," says Crumley, the group's president.

Meanwhile, 500 miles to the north, the Bear Paw Mountains Elk Working Group has been wrestling with a similar problem. Elk range across multiple land ownership boundaries, but hunters had been having trouble getting permission from multiple landowners. According to Shane Reno, FWP game warden at Havre, hunting success rates in the area had been just 8 to 16 percent, which meant elk numbers—and complaints—were growing.

The solution, agreed to by working group members, was to hire a hunt coordinator who links ranchers who spot elk on their property with hunters who have permits for that district. During the past three seasons, the coordinator has helped hunting success rates climb to 40 percent, which has begun to bring elk numbers down to more tolerable levels for local ranchers.

FWP wildlife managers believe such local control and cooperation is the key to successful elk management in many trouble spots. They maintain that only when landowners, hunters, and department employees meet regularly, to discuss various attitudes toward elk and possible ways to meet everyone's needs, can problems be resolved fairly and effectively. The 2003 legislature agreed, authorizing the department to spend more money to facilitate additional working groups.

> "The key has been getting informed consent from ranchers, sportsmen, and the agencies. That's an unbeatable combination."
>
> —Graham Taylor, *FWP Regional Wildlife Manager*

The department is also revising its 11-year-old statewide elk management plan to reflect changes in Montana's elk populations and public concerns about elk depredation and hunting access. According to department officials, the revision aims to address the diverse and often conflicting public attitudes toward the animals.

"When we manage elk," says Kurt Alt, FWP southwestern region wildlife manager, "we struggle to balance the economic interests of landowners, the recreational interests of hunters and others who like to see elk, and the ecological realities related to habitat, biology, population dynamics, and so on. All three parts of the equation have to work, or the management doesn't succeed."

Liken it to three legs of a tripod. If one is weak—say, if hunters believe that FWP is catering too much to ranchers, or vice versa—the tripod topples.

Which is why FWP staff on the front lines of the elk issue say building trust with local ranchers is essential. "We in the department need to meet with landowners one on one," says Reno, who worked for years to build relationships with local citizens. "They need to know we are part of

JEFF HENRY/ROCHE JAUNE PICTURES

NUMBERS GAME Killing bulls doesn't reduce most game damage problems. To keep numbers down, hunters must harvest more cow elk.

their community, that we want to work through their problems with them."

That's easier said than done. Reno admits he's lucky to live in an area where ranchers get along with each other and ate friends with many local hunters. Other efforts to start working groups have failed because one or more key landowners chose to not participate. What's more, the working group approach may not be right in many areas of the state.

"There's no simple, one-size-fits-all solution," says Jeff Herbert, assistant FWP Wildlife Division administrator. "Elk management is incredibly complex, and so many factors—including weather, changing demographics, different attitudes by landowners toward elk—are simply beyond our control."

That complexity notwithstanding, Montana's current elk management dilemma can be reduced to a simple equation: Throughout parts of Montana there are too many elk, eating pasture and haystacks. Throughout all of Montana (and the United States), there are people who want to hunt those elk.

Putting the two together shouldn't be difficult. But it will remain so until landowners, FWP, and hunters can agree on how Montana's elk should be managed—and to the benefit of whom.

Brewing Up Solutions in the Devil's Kitchen

When rancher and former legislator Chase Hibbard hears the story of FWP sharpshooters having to kill 15 elk in a cornfield east of Billings, he shakes his head and frowns. "That's what happens when landowners don't work together as a community," he says.

Hibbard should know. He and his neighboring ranchers anticipated such a problem back in the late 1980s. Elk on the nearby Beartooth Wildlife Management Area were growing more numerous, from 300 head when it was purchased in 1971, to 1,500 in 1989. Many wintered on adjacent ranchlands.

"Sometimes in the fall we'd have 600 to 800 elk in our meadows," says Hibbard, an owner of the Sieben Livestock ranch near Cascade.

After he and neighboring ranchers learned that FWP aimed to further increase the elk population, they decided to do something. They invited local hunters, other ranchers, and state and federal land managers together to find a way to balance growing elk numbers with landowner tolerance and hunter expectations.

"We wanted to establish a forum for exploring and resolving problems before they entered the arena of the legislature and FWP Commission hearings," Hibbard says. "Those aren't the best places to solve local problems like the one we were facing."

They named their group after a nearby BLM landmark, a rocky labyrinth of caves, tunnels, and passageways. "The Devil's Kitchen symbolized the complexity and inaccessibility of the problem we were dealing with," Hibbard says.

What the Devil's Kitchen Working Group proposed to the FWP Commission was to limit the bull harvest (to increase the number of trophy bulls), liberalize the antlerless harvest (to reduce the overall elk herd size), increase the amount of public hunting on ranches, and have FWP help manage the hunting activity.

After some initial hesitation, the commission okayed the group's proposal in 1994.

Since then, says Graham Taylor, FWP regional wildlife manager at Great Falls, the number of older, bigger bulls has increased, the overall herd size has decreased, and elk damage complaints among group members are almost nonexistent.

"The key has been getting informed consent from all the interested parties—ranchers, sportsmen, and the agencies," says Taylor, a member of the group since its inception. "That's an unbeatable combination."

ERWIN & PEGGY BAUER

BIG BULL BENEFIT In addition to lowering overall herd size, the Devil's Kitchen Working Group's proposal has greatly increased the number of older bulls in the population. That required the consent of local hunters, who traditionally had been able to shoot the young spike and raghorn bulls that, when left to live a few more years, are now growing up to be trophies.

A Montana Hunter in Bavaria

Could the highly successful German system of hunting and wildlife management offer insight into sustaining a hunting culture in the increasingly urbanized Treasure State?

By James Hagengruber

It was a bright January afternoon, and sun rays wove through snow-covered fir branches in a thick Bavarian forest. My friend Gerda and I were hiking to a small tavern accessible only by foot for a snack of beer, bread, and sausage.

Clumps of snow blew down from the fir branches, landing around us with soft thuds. Through the sunny snowstorm, Gerda spotted a man hoisting bales of hay from a wagon.

"It's Hubert, the hunter!" she whispered to me, her pace quickening.

He was tall and wore a green wool cape and funny-looking (to me) pointed hat, out of which sprayed a brush of boar bristles. My mind swirled with memories of the huntsmen depicted in illustrations from childhood fairy tale books. So this was a real German hunter, I thought. How quaint. He's probably a millionaire, maybe from one of those royal families that forced my peasant ancestors to flee this very land generations ago.

The huntsman kept working as he offered the traditional Bavarian greeting, "*Grüss Gott!*" ("God's greetings!").

Gerda knew him, and they exchanged small talk. We watched as Hubert spread hay on the forest floor. He explained that icy air from Russia was on its way. With the snow so deep, the local elk herd could use a little extra food. Winter was hard this year, he said.

JAMES HAGENGRUBER

PARADE PRIDE In Munich, hunters are actually cheered by onlookers as they march in the annual Folklore International Parade.

I mentioned that I, too, was a hunter. He smiled, removed his gloves, offered a hand and said, "*Waidmann's Heil!*"

Later, sitting next to a fireplace at the tavern, Gerda explained that this greeting was the way hunters say hello. It means something to the effect of "Greetings, good hunter." Before draining our mugs, Gerda asked me why I hadn't told her I hunted.

Before traveling to Germany, I had been living in a liberal Midwestern college town, a place where saying you were a hunter would be akin to proclaiming, "I eat kittens." Gerda, like most young people I knew in Germany, had political views far to the left of most Americans. I told her I hadn't mentioned my passion for hunting because doing so usually meant the start of a long debate.

Not in Germany, she replied. People might not agree with all aspects of hunting, she said, but most everyone respects hunters. At a party that night, Gerda cheerfully announced to her friends that I was a hunter. It was a strange feeling.

That was seven hunting seasons ago. Since then, I have moved to Billings and begun a life working and hunting in Montana. I hadn't thought much about my glimpse into Germany's hunting culture until the

THOMAS BAUMEISTER

HONORING HERR BOAR Around a bonfire, hunters celebrate a successful wild boar hunt after carefully arranging the animals on fir boughs. In Germany, hunters are expected to pursue and kill all game animals with respect, according to centuries-old traditions.

summer of 2002, when I returned there for a two-month journalism fellowship in Munich. Along with other story interests, I wanted to use the time to explore the German system of hunting.

I found one of my best sources of information before I left Montana. His name is Thomas Baumeister, a native-born German who now coordinates the Hunter Education Program for Montana Fish, Wildlife & Parks. Baumeister, who has a doctorate in wildlife management from the University of Montana, gave me the rundown on hunting in Germany. He painted a picture of a highly industrialized country with strong hunting traditions and an abundance of game. It's a country where hunters, not professionals, manage wildlife and do it well. And in Germany, hunters show a great reverence for their kill and for the traditions of hunting. In exchange, Baumeister said, they are afforded respect by their fellow citizens to a degree unmatched in the United States, even in Montana.

The hunting culture and wildlife management of Montana would seem hard to beat. We have an abundance of big game, waterfowl, and upland birds. We also have millions of acres of public and private hunting land. Baumeister agreed. That's one of the main reasons he decided to live here. As a young hunter in Germany, he told me, he often dreamed of Montana's vast game herds. Yet he also had high praise for the German style of hunting and wildlife management.

"I think American hunters could learn some things from the German hunting system, especially as urbanization keeps encroaching on the wildlands here," said Baumeister.

I was skeptical. Despite my earlier experiences in the Bavarian forest, I couldn't help but cling to the notion that hunting in Germany was all about rich people chasing half-tame deer in game parks. Besides, Germany is a densely populated country. What type of hunting opportunities could such a crowded, urbanized place afford?

Before I left on my trip, Baumeister told me to keep an open mind: "You might be surprised by what you find."

After settling into life in Munich, I began to notice the influence of hunting on everyday life in what is one of the world's most socially liberal nations. Mostly, it was small things. One of the busiest stalls at the farmer's market, for instance, sold cuts of wild game (hunters are allowed to sell their harvest). Nearly all

JAMES HAGENGRUBER

JAMES HAGENGRUBER

JAMES HAGENGRUBER

HALL OF HORNS Hundreds of mounted red deer, fallow deer, and other trophies line the halls of the German Museum of Hunting and Fishing in Munich. Calligraphy on bleached skulls, mounted European style, record the hunter's name as well as the kill date and location.

TODAY'S SPECIAL At a wild game grocery in Munich, signs advertise deer steaks, elk and hare filets, and the daily special: young boar.

the best restaurants headlined their menus with game dishes: wild boar goulash, peppered hare, venison with cranberries, pheasant stew, and the like.

To learn more about hunting in Germany, I arranged to meet with Bernd Ergert, director of the German Museum of Hunting and Fishing. The museum is in the heart of Munich's old town, and before our meeting I strolled through the airy institution. On its white walls hung hundreds of srag mounts and antlers. Lining vast hallways were oil paintings of royalty standing before neat rows of fallen deer and boar, epic battles between hound and bear, and St. Hubertus, the poacher-turned-holy man, who changed his ways after seeing a glowing cross between the antlers of a stag. (That cross-and-stag image adorns the green bottles of Jagermeister—"Master hunter"—liquor, bottled in Germany and available throughout the United States.)

Many of the museum visitors wore the same pointed green Robin Hood hat I saw on the hunter I had met seven years earlier. I learned later from Ergert and Baumeister that the hat is a signature piece of clothing for hunters, who wear it and other apparel in public whenever possible.

Before going any further with this story, let me address the popular notion of hunting in Germany being only for the elite: It's not true. "You don't have to own a castle on a hill to be a hunter," said Baumeister. "If you have the commitment, hunting is available to almost anyone in Germany."

It's true there is almost no hunting allowed on public land in Germany, but many working-class citizens are able to afford a hunting lease on private property. Though lease payments can cost up to $10,000 per year, they are often split among members of a small hunting group.

Leased hunting areas usually run about 500 acres. After being sold the lease, the hunter must submit a game management plan, which is reviewed and approved by a local official. If the hunter does a good job of managing the land and the wildlife, then it's common for the lease to be extended.

I was surprised to learn that many landowners don't automatically have the right to hunt on their own property. If a parcel is less than 150 acres, a landowner who wants to hunt there must compete with other hunters in bidding for that right.

Far more important than money to becoming a hunter, Ergert said, are brains and dedication. Hunters spend a year srudying for their license, and half fail on their first try. Even wealthy owners of large estates must pass the difficult exam if they wish to hunt.

Hunters are expected to memorize a dizzying array of laws. They must be able to identify not only every species of animal in the forest, but also its sex and age. Their shooting skills must be precise, and they must learn how to develop wildlife management plans. Also, they are required to practice elaborate hunting traditions, such as singing the proper song to announce the death of a prized stag.

Just as intense as the education requirements are the considerable responsibilities that come with being a German hunter.

James Hagengruber is a journalist and hunter who lives in Billings.

Germany is almost exactly the size of Montana, but with roughly 80 million more residents. The 450,000-some hunters in Germany play the combined role of game warden, wildlife biologist, and agricultural pest controller. They also must ensure that wild game animals have sufficient food and habitat.

"The hunting right and the conservation duty are inseparable," said Baumeister.

When something goes wrong, such as a wild boar destroying a farmer's corn crops, the hunter who leases that land is responsible for the damages. If deer continually raid a citizen's apple trees, the local hunter could face accusations of laziness and incompetence. The complaints might not be direct, but whispers and side glances from neighbors are no less stinging. In Germany, community pressure can be extremely powerful in ensuring a hunter fulfills his obligations, Baumeister said.

The burdens of a German hunter might weigh heavily, but the country also affords its hunters rewards and respect rarely seen on this side of the Atlantic.

This was evident nearly every weekend when I traveled through the countryside. While stopping for lunch at a country tavern, it was not uncommon to see a uniformed hunter—wire-haired pointer resting at his feet—sitting next to the police chief and *Bürgermeister*, or mayor, holding court at the best table. Citizens would stop to talk with the *Bürgermeister* about a sidewalk construction project or complain to the police chief about a neighbor's noise. Then, before leaving, the visitor would ask the hunter about his latest field excursion. It was through the local hunter, not a state or local agency, that people learned what was going on in the woods.

Though Germany's politics run to the left of center—the nation's Green party was one of the top vote-getters in last year's elections—the liberal politics have not spelled unreasonably bad news for German hunters. Because they maintain the health of the land and wildlife populations and have a strict code of ethics and honor, hunters continue to occupy a place of respect in most communities, Ergert said.

I saw this for myself during the massive Folklore International Parade, which marks the beginning of Oktoberfest. Of the nearly 10,000 people who marched in the parade, some of the loudest applause from the crowds went to a group of costumed hunters. The normally stoic spectators lining the street shouted and pumped their fists in the air as the hunters marched past while gently tipping their hats to the crowd. It was the applause that onlookers at a Montana small-town parade would give to volunteer fire fighters or decorated military veterans.

Each aspect of a hunt in Germany is laden with tradition and symbolism. Though modern breathable fabrics and fleece have snuck into the hunters' wardrobe, traditional dark green or gray are the only colors hunters would consider wearing. One exception, said Baumeister, is a strip of blaze orange now worn on some hunting hats for safety. "And even that was considered extremely radical and controversial," he said.

Hunters who shoot a deer or other animal are expected to pause in silence for at least a few minutes, Etgert told me. This is a time meant to contemplate the complex mixture of elation and sadness that comes with killing any animal. A downed deer is laid on its right side, with a small branch of fir or oak—known as *Der letzte Biss* ("the last bite")—placed in its mouth as a mark of respect. A second branch is placed on the deer to show that the hunter has assumed ownership of the dead animal. Hunters who follow all the appropriate rules and traditions of the hunt are presented with a shooter's branch, which is worn in the left side of the hatband until sunset on the day of the kill.

Baumeister said that after the hunt, the hunters gather and celebrate with traditional songs, accompanied by horn players, honoring the animal, the hunt, and the hunter.

"It's so emotionally powerful," he said of the traditional evening celebrations. "When I think back on it, the hairs on my arms stand on end."

Among the most revered of the German hunting traditions are the annual hunter gatherings, where skulls from all harvested big game animals are displayed. A committee of hunters scrutinizes the skulls to see if each hunter has killed the animals identified in his or her official game management and harvest plans.

These plans are required for each hunting lease and specify the precise number of game animals that should be harvested to keep wildlife numbers in balance with the land. For instance, a lease might call for

THOMAS BAUMEISTER

THE LAST BITE In Germany, showing respect for downed game animals is a traditional part of the hunt. When a deer is killed, it is laid on its right side and a small branch of fir or oak is placed in its mouth. A second branch is placed on the mortal wound, indicating symbolically that the hunter has taken ownership of the animal. Hunters also keep meticulous records, noting in their journals weather and habitat conditions, measurements of the animals they kill, and other observations relevant to the hunt.

THOMAS BAUMEISTER

RESTING PLACE A German drahthaar, a versatile hunting breed, lies beside a dead red deer stag. In Germany, these and other dogs are used to hunt upland birds, waterfowl, and big game.

harvesting 10 elk, 20 roe deer, and an equal number of wild boar. Moreover, the hunter is expected to kill both male and female animals of various ages, to ensure a healthy population structure.

If, for example, a hunter shoots a six-year-old stag when the harvest plan calls for shooting a ten-year-old, a committee member will place a red dot sticker on that animal's skull. According to Baumeister, such measures are remarkably effective at pressuring hunters to make cautious choices.

"The red dot, which is visible to everyone at the gathering, is a huge disgrace," he said.

Germany's hunting system is ruled by peer pressure, strict ethical codes, and a demanding hunter education system. Yet it produces abundant game and opportunities—not to mention public respect—for hunters. Would such a system work in Montana or other states?

Montana bowhunters would certainly scoff at trading their 3-D camo for lederhosen. And it's hard to imagine a successful antelope hunter in the middle of Garfield County sounding his trumpet. What's more, managing wildlife solely with hunters probably wouldn't work in a place where the tradition for 100 years has been for hunters to leave most management work and decisions up to trained professionals.

Nevertheless, some aspects might be worth considering. Baumeister certainly thinks so. During the past few years, he has been meeting with colleagues in other states, and hunter education instructors in Montana, to introduce them to the German hunting system and discuss new ways to think about hunting and wildlife management.

"I talk about how sharing wildlife management responsibilities with the hunting public could lead to hunters being more willing to accept responsibility for their actions," he says.

To some extent, Montana hunters already have a role in managing the state's wildlife. Private conservation groups such as the Rocky Mountain Elk Foundation and the Montana Wildlife Federation play a vital role in improving habitat, codifying laws, and securing access to hunting land. There remains, however, a gap between hunters and the professionals whose responsibility it is to manage the fish and game of Montana, Baumeister says.

"In some cases, hunters could become more involved in the day-to-day management of wildlife, and I'm not talking about just hanging up some bluebird nesting boxes," Baumeister says.

One idea is for bear or mountain lion hunters to systematically record their sightings for use by FWP as a population monitoring tool. Many of these hunters have decades of field experience and are eager to share their expertise, Baumeister says. Another is the possibility of a state-sponsored website where hunters, hikers, and others could record sightings of rare species or those difficult for wildlife managers to count. The information could help managers identify distribution patterns for those species.

Montana's wildlife management system has been a great success, emulated in other parts of the country and the world. And the hunting tradition in Montana remains strong. Hunters are tolerated here perhaps more than anywhere else in the nation. But that may be in large part because we are still largely a rural state. Hunters fare less well in New Jersey and California. And as more and more people move into the Treasure State, many of them with anti-hunting sentiments, maybe we Montana hunters could learn a thing or two from the Germans. They might be able to show us how hunting could continue to thrive as our state becomes more urbanized.

Maybe there will even come a time when people actually cheer when we walk past.

MONTANA'S
UNCOMMON CRITTERS!
2004
CALENDAR

Montana's Uncommon Critters!

Why Uncommon Critters?

All animals are interesting. But many uncommon critters are even more interesting. That's because you don't see them very often. Or you didn't even know they existed.

This calendar features 12 uncommon Montana wild animals that people don't usually read about. Grizzly bears, gray wolves, and whooping cranes are species that get lots of attention. They are like the movie stars of the wildlife world. But what about the white-faced ibis? Or the sicklefin chub? Ever hear of the spotted bat? These are just three of the little-known critters featured in this calendar.

Why are these species uncommon?

1. Often, the habitat needed by these creatures gets changed. Habitats are the places animals need to live, such as lots of cold water for the arctic grayling or salty wetlands for the piping plover. One example of a change in habitat is when a river gets dammed. That blocks fish such as sturgeon from swimming upstream and downstream to the habitat they need to survive.

2. Some species are uncommon because Montana is at the edge of their natural range. For example, you don't find many white-tailed prairie dogs in Montana because they mostly live south of here.

3. Some uncommon critters are newcomers to Montana. People never saw them here before, and now, for some reason, they are showing up. One example is the white-faced ibis, which mainly lives down in Utah but recently began flying up to western Montana.

4. The fourth reason some species are uncommon is because they are hard to find. They are either tiny, live in remote places or underground, or come out mainly at night. The spotted bat is one such critter. Montana might have lots of spotted bats, but how would you know?

Want to know more?

For more information on Montana's fish, wildlife, insects, amphibians, and other species, log on to the Montana Fish, Wildlife & Parks website (fwp.state.mt.us). At the home page, click "Wild Things" in the left column, then click the "Montana Field Guide" icon.

Calendar sources: Montana Fish, Wildlife & Parks, Montana Natural Heritage Program, Montana Historical Society, National Weather Service, *Montana Almanac*, *Montana Magazine*, *Roadside History of Montana*.

SPORT FISH & WILDLIFE RESTORATION

Montana Outdoors

Montana Fish, Wildlife & Parks

About the artist

Award-winning illustrator Peter Grosshauser lives with his wife, two daughters, two dogs, and a cat in Flagstaff, Arizona. Before that he lived for 10 years in Montana. He illustrates posters, brochures, magazine articles, and books, including *How the Zebra Got Its Stripes* and *Ghost Bat in a Gum Tree*. Peter, who has been interested in wild animals since he was a boy, is the creator of the comic strip *Wild Willy*.

Arctic Shrew!

NOTE: All season dates and application deadlines listed in this calendar are tentative. Consult the FWP 2004 hunting and fishing regulations or web site for details.

Arctic Shrew

Until a few years ago, no one even knew these animals lived in Montana. The first sighting was in the state's northeastern corner in 2000. Arctic shrews mainly live in hockey land—Canada, North Dakota, and Minnesota. They hang out in open, wet areas on the prairie. The arctic shrew is only about 4 to 5 inches long. It and Montana's 10 other shrew species are the state's smallest mammals. But they have big, big appetites. They eat their entire body weight in insects every day. They eat so much because their heart beats about 1,000 times per minute.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
December 2003 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	**February 2004** S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29			Happy New Year! **1**	**2**	**3**
4	**5**	**6**	**7**	 Howl at the full moon! **8**	**9**	1864: Henry Plummer is captured by the Vigilantes in Bannack. **10**
1980: The temperature in Great Falls jumps 47°F degrees in just 7 minutes. **11**	**12**	**13**	**14**	**15**	Smith River applications available. **16**	**17**
18	Martin Luther King Jr. Day **19**	1954: Coldest recorded temperature in the lower 48 states, –70°F, recorded at Rogers Pass. **20**	**21**	**22**	**23**	**24**
25	**26**	**27**	**28**	**29**	**30**	**31**

Take your grandparents ice fishing!

JANUARY

ARCTIC GRAYLING!

Arctic Grayling

As you can tell by its name, this is a fish usually found in Alaska and northern Canada. In fact, Montana has the only river population of arctic grayling in the lower 48 states. The grayling is a cousin to trout and salmon. River grayling only live in coldwater streams and rivers that have plenty of water flow. The strangest thing about the grayling is its giant dorsal fin, which looks like a sail. The main things grayling eat are underwater insects. The biggest threat to these beautiful fish is a lack of cold water. When rivers get too low, or too warm, grayling are unable to survive.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1989: In Shelby, 12 railroad cars are blown off the tracks by 100-mph winds. **1**	Groundhog Day **2**	**3**	**4**	**5**	**6** Howl at the full moon!	**7**
8	**9**	1977: The westslope cutthroat trout is designated Montana's state fish. **10**	**11**	**12**	**13**	Valentine's Day **14**
15	President's Day **16**	**17**	**18**	**19**	**20**	**21**
22	**23**	**24**	**25**	**26**	**27**	1895: The bitterroot became Montana's official state flower. **28**
2003 hunting and fishing licenses expire. **29**						

January 2004

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March 2004

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28	29	30	31			

Sign up for hunter and bowhunter education classes!

FEBRUARY

Peep.
PIPING PLOVER

Piping Plover

Plovers are a shore bird, which means they spend their time along the shores of lakes and rivers. Piping plovers are named for their musical whistle. It sounds like the note from a musical pipe. This tan bird is the color of sand so it can stay in the open but remain hidden from predators. It lives next to salty wetlands in northeastern Montana and along Fort Peck Reservoir. Piping plovers eat insects and worms that they dig out of mud or silt with their beak. The main threats to plovers are gulls (which eat their eggs), the loss of wetlands, and high water that floods nests.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	New FWP license year begins. 1872: Yellowstone National Park established. 1	2	3	4	5	6 Howl at the full moon!
7	8	9	10	11	12	13
14	15	16	St. Patrick's Day 17	18	19	20
First day of spring 21	22	23	24	25	26	27
28	29	30	31			

February 2004

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April 2004

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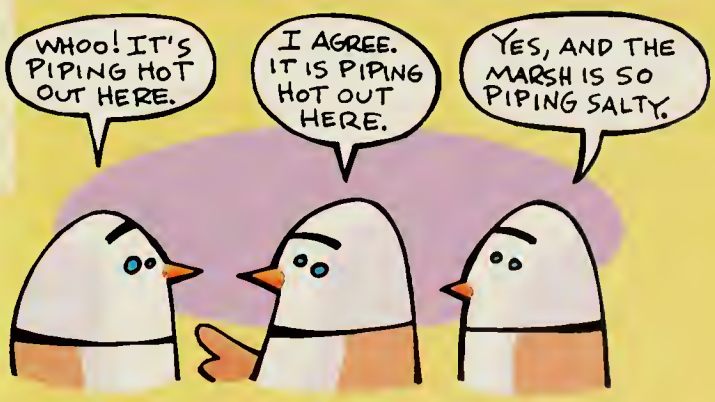

Take your parents to Freezeout Lake to view thousands of snow geese and tundra swans migrating north!

MARCH

WHITE-TAILED PRAIRIE DOG

White-Tailed Prairie Dog

Prairie dogs aren't actually dogs. They are rodents, like squirrels and mice. Prairie dogs live in communities called colonies or towns. They "talk" constantly, by barking, whistling, and yipping. White-tailed prairie dogs spend most of the time underground, sleeping or hibernating. Sometimes you can spot them sitting on their mounds or running from burrow to burrow. The main threats to these prairie dogs are a disease called plague and the loss of their shrubland habitat. In Montana, white-tailed prairie dogs have only been found in southern Carbon County.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	1	2	3
Daylight saving time begins. 4	5 Howl at the full moon!	6	1983: The grizzly bear is named Montana's official big game animal. 7	8	9	10
Easter 11	12	13	Spring black bear license deadline. 14	Spring black bear season opens. 15	16	March For Parks at Makoshika State Park 17
18	19	20	21	Earth Day 22	23	24
1969: A blizzard strikes eastern Montana and leaves 20-foot-high snowdrifts. 25	26	1805: Lewis and Clark Expedition enters what is now Montana. 27	28	29	Arbor Day 30	

March 2004

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May 2004

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23	24	25	26	27	28	29
30	31					

Bears begin emerging from their dens!

APRIL

BURROWING
OWL

Burrowing Owl

These are the strangest owls you'll ever see. They live in underground tunnels on prairies, not in trees in forests. They are out during the day rather than at night, like other owls. They can turn their heads almost upside down. They have a short, fat body on skinny legs. And they make a goofy bobbing motion with their body. The burrowing owl is about the size of a robin. It hangs around prairie dog towns, using the burrows dug by prairie dogs. These owls mainly eat insects. The biggest threat is the loss of grasslands and the prairie dog colonies where these owls live.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
April 2004 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	June 2004 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30					Moose, sheep, and goat special drawing application deadline. **1**
2 Mother's Day **9**	1933: A white buffalo named Big Medicine is born at the National Bison Range at Moiese. **3** **10**	**4** 1910: Glacier National Park is established. **11**	 Howl at the full moon! **5** **12**	**6** **13** 1985: *Maiasaura peeblesorum*, the "duck-billed dinosaur" becomes Montana's official fossil.	**7** **14**	**8** General fishing season opens. **15** National Safe Boating Week May 22-28
16	**17**	**18**	**19** 1864: Montana Territory is created.	**20**	**21**	**22**
23	**24**	**25**	**26**	**27**	**28**	**29**
30	Memorial Day **31**					

Paddlefish are swimming up the Missouri River to spawn!

MAY

PADDLEFISH!

Paddlefish

Imagine a fish with a canoe paddle at the end of its head. That's the paddlefish. This odd-looking fish lives in big, warm rivers like the Yellowstone and the Missouri. This is a prehistoric species that was around when dinosaurs were living here. Unlike most fish, the paddlefish has almost no scales, only skin. The paddlefish uses its paddle to sense the electrical charges made by tiny creatures called zooplankton. It eats by sucking in water and then straining out the zooplankton with filters in its gills. The big threat to paddlefish are dams, which block the fish from swimming upstream and downstream.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31	Deer, elk, and antelope special drawing application deadline. **1**	**2**	**3** Howl at the full moon!	**4**	National Fishing Week June 5–12. **5**
1964: A rainstorm floods western Great Falls with 12 feet of water. **6**	**7**	**8**	**9**	**10**	**11**	Buzzard Day at Makoshika State Park. **12**
1805: Lewis and Clark first encounter cutthroat trout near Great Falls. **13**	Flag Day 1937: Indian artifacts are discovered at Ghost and Pictograph Caves. **14**	**15**	**16**	1876: Lakota and Cheyenne warriors fight Gen. Crook and the U.S. Army at Rosebud Battlefield. **17**	**18**	**19**
Father's Day **20**	First day of summer and longest day of the year **21**	1805: Meriwether Lewis chronicles the western meadowlark, now Montana's official bird. **22**	**23**	**24**	1876: Lakotas and Cheyennes fight Gen. Custer at the Battle of the Little Big Horn. **25**	**26**
27	**28**	**29**	Snowmobile registrations expire. **30**	1	2	3
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May 2004

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July 2004

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24	25	26	27	28	29	30
31						

Take your parents to an FWP fishing clinic!

JUNE

Coeur
d'Alene
Salamander

Coeur d'Alene Salamander

Pronounced "core duh-LANE," this is the mountain goat of salamanders. It lives in the Rocky Mountains on rocky slopes near streams and waterfalls. It's tiny—only about 2 ½ inches long—and mainly eats insects. Like many salamanders, this one spends most of its time underground. Sometimes it will stay below ground for up to seven months at a time. There it is safe from the harsh winter climate of the Rocky Mountains. Coeur d'Alene salamanders usually come out from between the rocks only at night.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Sandhill crane and fall turkey application deadline. **1**	1937: Lewis and Clark Caverns becomes Montana's first state park. **2** Howl at the full moon!	**3**
Independence Day **4**	**5**	**6**	**7**	**8**	**9**	**10**
11	1979: Egg Mountain dinosaur site discovered near Choteau. **12**	**13**	In a typical summer month in Montana, lightning will strike more than 100,000 times. **14**	**15**	**16**	**17**
18	**19**	1893: Highest temperature ever recorded in Montana was 117°F at Glendive. **20**	**21**	**22**	**23**	Bannack Days at Bannack State Park. **24**
Bannack Days 1806: William Clark carves his name on Pompeys Pillar. **25**	**26**	**27**	1862: Gold is discovered in the Beaverhead Valley at a site near Bannack. **28**	**29**	**30**	**31** Howl at the full moon! (This one's a blue moon!)

June 2004

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August 2004

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22	23	24	25	26	27	28
29	30	31				

Go camping in a state park!

JULY

WESTSLOPE
CUTTHROAT
TROUT!
!

Westslope Cutthroat Trout

This is Montana's official state fish. Its name comes from the orange-colored slash beneath its jaw. Although it is called westslope, it actually lives on both the east and west sides of the Rocky Mountains. This trout lives in cold, clean rivers and streams. The main threat to the westslope cutthroat is damage to its coldwater habitat. Also, this species can be overfished, because it gobbles up bait, lures, and flies. Another concern is that cutthroats breed with rainbow trout, creating "mongrel" fish instead of purebred cutthroats.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9 1950: Federal Sport Fish Restoration Act became law.	10	11	12	13 Becoming an Outdoors Woman Summer Workshop	14 Theater in the Park at Makoshika State Park.
15 Theater in the Park at Makoshika State Park.	16	17 1959: Quake Lake is formed after a massive earthquake triggers a slide.	18	19	20	21
22 1805: Lewis and Clark first encounter grayling near Dillon.	23	24	25 Mountain lion and black bear license deadline.	26	27	28
29	30 Howl at the full moon!	31				

July 2004

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September 2004

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19	20	21	22	23	24	25
26	27	28	29	30		

Bull trout are swimming up western Montana rivers to spawn!

AUGUST

WHITE-FACED
IBIS

White-Faced Ibis

This bird looks like a drawing from an Egyptian tomb. It has a long beak that curves down and a dark-brown body with metallic green wings. Its name comes from the white feathers around its eye, which is red. The white-faced ibis mainly lives in salty marshes, like the Great Salt Lake in Utah. For years no one had ever seen one in Montana. Then, in the 1970s, some started showing up here. Most of the white-faced ibises in Montana are found at Benton Lake and Bowdoin Lake. These birds nest over water in cattails and bulrushes. They eat insects they catch in the mud and shallow water.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			Grouse, partridge, dove, and fall turkey seasons open. 1	2	3	Archery antelope, deer, and elk seasons open. 4
5	Labor Day 6	7	8	1968: The Pryor Mountain Wild Horse Range is established. 9	10	11
12	13	1983: The world's first dinosaur embryos are discovered at Egg Mountain. 14	Backcountry deer, elk, moose, sheep, goat, and fall black bear seasons open. 15	16	17	18
19	20	21	First day of autumn 22	23	24	25
26	27	28 Howl at the full moon!	29	30		

August 2004

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October 2004

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24	25	26	27	28	29	30
31						

Antelope are rutting and elk are bugling!

SEPTEMBER

SPOTTED BAT!

Spotted Bat

This is one of the hardest animals in North America to find. It's a beautiful black bat that has white spots and huge pink ears. It lives in southeastern Montana up in the cracks of sandstone cliffs. It is also found along high cliffs next to the Missouri River. These bats mainly eat moths, which they catch at night. This is one of the few bats you can hear. When flying around, it makes a *tick-tick* sound. These bats don't live in colonies like most other bats. They like to be alone. Because spotted bats are so hard to find, no one knows much about them.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
September 2004 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	November 2004 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	26	29	30	1	2
3	4	1877: Nez Perce leader Chief Joseph surrenders at Bears Paw Battlefield. 5	6	7	8	Pheasant season opens. 9
General antelope season opens. 10	Columbus Day 11	12	13	14	15	16
1909: The first bison are released at the National Bison Range at Moiese. 17	18	19	20	21	22	23
General deer and elk seasons open. 24	25	26	27	28 Howl at the full moon!	29	30
Happy Halloween! Daylight saving time ends. 31	1	2	3	4	5	6

Bears are heading toward their winter dens!

OCTOBER

SICKLEFIN CHUB

Sicklefin Chub

This little fish, only about 4 inches long, lives in big rivers such as the Missouri and the Yellowstone. Sicklefin chubs like warm waters that are deep, muddy, and fast. Because it is hard to see down there, they find their food by smell. These fish have taste buds all over their head, so they can taste (smell) the water flowing past. For a person, that would be like having a tongue instead of a face. Sicklefin chubs are named for their dorsal fin, which is curved like an old-time tool called a sickle.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	Election Day 2	3	4	5	6
7	8	9	10	Veteran's Day 11	12	13
14	15	16	17	18	19	20
21	22	23	24	Thanksgiving Day 25	26 Howl at the full moon!	27
28	29	30 General fishing season closes on rivers and streams.				

October 2004

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December 2004

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Antelope are shedding their horn sheaths!

NOVEMBER

PALLID
STURGEON

Pallid Sturgeon

Like Montana's other two sturgeons—the white and the shovelnose—the pallid is a prehistoric fish. It was swimming here when dinosaurs walked across Montana. Instead of scales it has large, bony plates called scutes. Long wormlike whiskers, called barbels, help the sturgeon smell food—such as insects—on the river bottom. This fish is named for its light color. It can live to be 70 or more years old. It swims in big, warm rivers. Dams prevent it from swimming upstream and downstream to reach food and spawning areas. Fewer than 50 pallid sturgeons remain in the upper Missouri River.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	1	2	3	4
5	6	7	Hanukkah begins 8	9	10	11
12	13	14	15	16	17	18
19	Candlelight tours at Lewis and Clark State Park. 20	First day of winter and longest night of the year. Candlelight tours at Lewis and Clark State Park. 21	22	23	1924: Temperature in Fairfield drops from 63°F at noon to –21°F at midnight. 24	Christmas Day 25
Ice skating rink opens for the winter at Bannack State Park. 26 Howl at the full moon!	Candlelight tours at Lewis and Clark State Park. 27	Candlelight tours at Lewis and Clark State Park. 28	29	30	New Year's Eve. Boat registrations expire. 31	1
2	3	4	5	6	7	8

November 2004

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January 2005

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23	24	25	26	27	28	29
30	31					

Take your family ice skating at Bannack State Park!

DECEMBER

This calendar was produced to promote understanding and conservation of Montana's uncommon wildlife species.

Montana Fish, Wildlife & Parks

Montana Outdoors

SPORT FISH & WILDLIFE RESTORATION

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Incoming

JOHN R. FORD

We set the goose decoys out in a horseshoe pattern with the open end of the horseshoe leading back to the shallow, grass-filled ditch where we will hide.

We have seven-dozen decoys on the ground, and it is minutes before 9 a.m. when I move my pickup to a spot behind an abandoned farmhouse less than a half-mile to the north.

I am walking back to the ditch when I see a lone goose approach the decoys, so I crouch and remain motionless. My partner, Bud Gaffney, is calling. Then he fires two shots with no effect, and the goose flies away. I resume walking, find my spot in the ditch where I have stowed a wool sweater and my camouflage bag containing lunch, extra shot shells, water, and a small wooden box holding a few cigars.

Geese are in the air now, coming off the Yellowstone River, and Bud and I are "talking" to them in plaintive tones. *Qu-at! Qu-at!* sound the flat notes of the flute call. Then I beckon with my other call: *Her-o-onk! Her-o-onk! Onk! Onk!* The geese are coming in! About a dozen of them, with wings set, coast closer and closer, and we wait until they are well within range before firing. Two thump on the ground, both lesser Canadas—the first I have taken in more than 25 years. (Most of the geese in Montana are western Canadas, a larger race of Canada goose.)

TOM J. ULRICH

One of the birds has a numbered leg-band and a bright yellow neck collar marked with "OR," which, we assume, means it was banded in Oregon. (I will send it to the U.S. Fish and Wildlife Service lab in California and get a computer printout reply in several months telling me where and when the goose was banded.)

We no sooner retrieve the geese when a lone honker flies in from the south, talking to us the entire way. Then it makes a wide swing and comes in low over the decoys. Bud rises and drops it with his 12-gauge.

Ten minutes later, I call in a lone Canada and hit it squarely with a load of BB steel from my 10-gauge. The bird folds and crashes to the ground about 20 feet away.

"Did you kill that one?" Bud asks, smiling.

Things slow down, so Bud and I talk. "I am 77 years old," he says, "yet I never get tired of doing this—lying in a ditch with adrenaline pouring out of my ears."

I have to laugh at that.

"Yeah, I've met guys who quit hunting once they got into their 50s or 60s. I'm still as crazy about it as when I was a kid. Probably more so."

"Geese to the southwest!" Bud says, and we drop into the grass of the ditch. The honkers make a wide swing, then they come over the decoys. I pick out a lone bird, fire once, twice, then once more, hitting it each time. The goose flutters, sets its wings, and flies in a big semicircle, crash-landing somewhere to the east beyond the cattle and horses grazing 150 yards away. I reload my 10-gauge and set out to retrieve the bird. It takes me a while to finally locate the goose, which is lying in a ditch. All during this time, the geese are flying well.

But by the time I get back to my spot next to Bud, things have slowed again.

"I think I'll move down the ditch and start plucking the birds," I say.

I am working on my second goose when three honkers fly by. I swing on one and fire a shot that misses. Ten minutes later, five honkers fly by the decoys, and I swing hard and fire. One drops about 65 paces from my hiding spot. I leave my shotgun in the ditch and walk out to retrieve the bird. When I am 20 yards from the goose, the sky again is filled with honkers. I have my limit, so I just have fun watching them parachute in to the decoys.

Bud misses a single, a couple shots at three incomers, and finally a shot at two coming right at him.

"I was worried that the last pair was going to land on top of you and injure you," I tease when I get back to within ear shot.

"I just can't get out in front of them today."

"Well, at least you're out here. That's all that counts."

Bernie Kuntz is an FWP information officer at Bozeman.

My Brown Boy

Sunlight, magic, and pantherlike screams on the frozen plains of north-central Montana

BY RICK BASS
ILLUSTRATIONS BY STAN FELLOWS

My boy, my brown boy Colter—named for the mountain man who outran a whole tribe of Blackfeet—is a year and a half old. He's proven himself a genius on grouse, and now I'm going to give him his first shot at pheasants. He and Tim Linehan's six-year-old golden retriever, Maddie, ride nestled together in the back of Tim's truck. It's cold—somewhere just this side or the other of zero—but sunny, by God; we find sun less than an hour into our journey, and don't look back.

We drive up and over the Continental Divide, somewhere east of Glacier: the world falls away before us. We ride down out of the mountains without speaking, merely gaping at the flat eastern country below, and blue sky, and sunshine. It doesn't matter what town we head to—they are not all the same, but they are all similar.

We check into the only motel in town, where we're the only guests. Because it's so damn cold, the potholes are frozen over, and there are no duck hunters around. No other pheasant hunters either; the sensible ones did their shooting in the warm months, October and November.

Tom will join us in a couple of days, but for now it's just Tim and me and Colter and Maddie. Tim loves his dog as much as I love mine.

Here is how it is done, according to Tom: you just go up to a farmhouse and knock on the door. You ask if you can hunt on the farmer's land. When the door opens, usually—according to Tom—they say yes. It's like Halloween, like trick-or-treat for grown-ups....

I've brought a spark collar, shock collar, behavioral correction unit, whatever you want to call it, with me, to keep Colter from running over the horizon—and I have got it plugged into the wall socket, charging, but sometime in the night it falls out, or Colter gets up and unplugs it, so that we will have to hunt naked. I am secretly relieved; I've never used it on him before.

We knock on doors that morning, and everyone says yes—hell yes—and we find pheasants. Colter's not locking down on the scent yet—he's not pointing—but he's sure finding the birds, weaving wildly and joyously through the thick grass, bounding in goofy pogo leaps like a mule deer, or a fox pouncing on a mouse—head swiveling this way and that, delirious on the jetstream of myriad scents, hundreds of birds running, scuttling, and the ringing of the dogs' bells, and the distant shouts of Tim and me trying to call our dogs back...Sometimes the flushed birds fly back toward us rather than away, so that we're able to get a shot, but we're missing and the birds just keep on flying, all morning long—some of them roosters, big roosters. One of them seems as large as a pterodactyl—Colter locks down on him, a perfect point—but I am so surprised by the bird's immensity, and the proximity of him, that I miss both shots....

We spend the rest of that sunny, frigid morning wandering around one of the great square fields, trying to keep the wind always in our faces, even when the dogs are no longer in sight. Colter is still jumpy, twitchy, anticipating the flushes—after each flush he runs after the bird, barking madly—but sweet and elegant Maddie is beginning to work closer, so that we're learning to read her body language: the propeller-like spinning of her thick banner of a tail when she is trailing a running bird—the "spin-move," like Hakeem Olajuwon in the paint, when the running rooster reverses direction on her, or when she hears or even sees it; and the double paw pounce—again, like a fox on a mouse under snow, when she flushes the bird—but still, we are missing, missing, missing....

We continue to be greeted at farmhouse front doors with unimaginable courtesy and hospitality. We try to remember the names of our benefactors, and jot down their addresses on scraps of napkins and paper bags, afterward; but in our enthusiasm for the hunt, in the mind-scrambling, mind-dumping, and reordering that goes on in the heat of the hunt, we usually end up forgetting the proper names and can speak of the coverts later that night in only a frantic, abbreviated shorthand: Red Barn Man. Happy Man. Hippie-Dude's Place.

The great mountains—the Stony Mountains—shine white and blue in the near distance, like guardians over our mountain souls as we frolic down in the flatlands—land of monoculture, land of sun, land of fun. The scowling intensity of our deer season—the gray broodiness, the sneakiness—falls away into bright laughter.

It's a day of many misses—all misses, in fact—but of unrelenting grace. Colter pointed a skunk, but all parties escaped unscathed. At one point he is gone for an hour and returns with a single porcupine quill stuck in his lower lip.

Back in the warm motel room Tim and I share a six-pack, bragging on our dogs, and watch a football game on that strange small blue-glowing miracle, the television. We've gotten so charged-up, so oversensitized and overstimulated, out on the strange magic prairie, that we need something to suck our brains out and back down to zero—to counterbalance things—and the beer and television are just the thing.

The dogs lie resting on the bed, watching us watch the game, their eyes bright, waiting for tomorrow.

In the morning the Rockies are carved in ice, sculpted white with new snow, as are the Sweet Grass Hills to the north, though no snow fell down in the flatland. The sky is clear, as if that snow up in the hills and mountains was put there not by clouds, but by magic. Each of the three hills is burnished by the day's new light, a strange distant copper color touching only the snow hills, and they seem almost a place to look at, rather than go to: as if they contain too much power to be approached by a frivolous state of mind.... We hunt around the missile silos that day. More birds, more shots, more misses. How can anyone miss anything as large as a pheasant? Colter and Maddie are both learning fast—Maddie trying to bend the running pheasants back toward us, or, if we're close enough, trying valiantly to make them flush right then and there, while Colter continues to freeze like a viper whenever he steps in that kill-zone of hot scent. So jazzed is the young pointer that, though

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he holds his points staunchly, as if cast in instant bronze, he has taken to screaming—not howling or yelping, but screaming—even as he holds that staunch point, and screaming louder than do the brightly colored birds with the long tails as they sail away unscathed, and the sounds of our presence echo and roll across the golden plains. There's so much shooting that I worry whether the security sensors around the silos are registering their alarm and red lights in Washington are glowing and beeping. Perhaps one more volley, one more fruitless fusillade, will send things over the edge, and the silo panels will fall away and the great doomsday rockets will emerge, lighting the sky orange and scorch-melting our flesh (the scent of cooked wheat all around us)—or perhaps Colter's panther-like screams will be enough to trip the signals and break the earth open below, cracking it in half and giving birth to the end of the world, all because we could not hit a pheasant....

That afternoon Colter points a short-eared owl in its stick-nest burrow on the ground. The bird refuses to flush, only hisses and clacks its beak at us.

Still later, he jumps a jackrabbit; both he and the rabbit are off to the races, moving so fast and in such a straight line across the horizon that they both seem to be drawn on a string, a fast string being sucked away into eternity...It's a lot of new stuff to throw at a young dog....

Just after dusk, making the long hike back to the truck, exhausted and birdless, with a full moon rising above the Sweet Grass Hills, we jump a big buck. His antlers are bone white, glowing in the moonlight: sun-bleached, out here on the plains, rather than the dark, deep-chocolate-colored antlers of the bucks we're used to seeing back in the jungle.

He courses the field as if in a mad slalom... a canine Zorro, slashing innumerable smaller Zs with seeming abandon....

We're starting to drag. The dogs are covering over a hundred miles a day. We're getting lots of shooting practice. I think we're going to hit one soon.

Tom, perhaps the world's most skilled outdoorsman, joins us the next day. He has brought Paggon, Colter's mother. Tom promptly begins killing birds—hitting and dropping whatever he aims at—but we forgive him because he is such a good friend.

Tim and I don't understand that you're not supposed to hurry up to your dog when he's on point—that you're supposed to saunter, calling casual words of encouragement; that you're supposed to try to keep your heart to less than 80 beats per minute, to be calm and steady as you stroll up, with the world—all that you and your dog have been laboring for, all autumn, indeed, all of your lives together—frozen as if forever.

Tom shows us how it's done. I've got to admit, he makes it look pretty cool: striding to his destiny, rather than charging high-kneed and panting through the stubble, shotguns broken and held aloft for safety as Tim and I do, storming the hills toward the frozen dark brown dog as if intent upon taking a beachhead.

At lunch, Tom lights a cigar and tells us that he'd be embarrassed if there was anyone around to see us. But there isn't. They've all gone south for the winter, for vacations in Billings, in Miles City, or the South Pacific. Farming is over 'til spring. The land lies silent, save for Colter's occasional screams....

Colter really wants a pheasant; so does Maddie. I don't care if I ever hit one or not—well, actually that's not quite true—but I do want these incredible, wonderful, steadfast dogs to have one.

We drive down the road, searching for a new covert to try. The mesh screen for the sliding window of Tim's camper shell flaps in the wind for where, on an earlier grouse hunt this fall, Colter, rather than remaining in the truck where we had left him (for disciplinary reasons) chose to chew his way out, and joined us—proudly—out in the woods (terrifying us as he came bounding up silently from behind, dark as a bear, fast as a lion...).

We stop at a homestead owned by a man we've named for the huge leaking plug of tobacco he keeps stored in his cheek as he talks. He has a little 40-acre piece up on the hill—we can identify it by the mass of rotting hay bales that rest at the bottom of the hill like a sinking ship, hay bales from the century before, perhaps—and he has more land too, he tell us, but those lands have coyote-getters scattered all around. Whether he means cyanide traps or explosive, baited cartridges buried just beneath the skin of the earth, I don't know, and don't ask. Tobacco Man advises us that we might want to keep our dogs away from those places, and we agree. We don't get into it with him—the studies that show that the harder you trap coyotes, the more offspring they produce and the younger the population becomes, and that it's those young coyotes who are usually the troublemakers....

Feeling troubled by the endless, useless war on coyotes, who would eat the rabbits and pheasants that eat the grass and grain that the cattle could otherwise eat, or the farmer could otherwise sell, we head over to the 40 acres. The other dogs are a bit winded, so we run Colter solo.

Forgive me for bragging on my dog. Forgive me always for doing this. It is not meant to be any reflection upon myself, by any means, but rather, simply, an astonished marveling, a celebration,

of my undeniable good fortune to be blessed, graced, by his all-encompassing talent.

He runs the table. We point him downhill and into the wind. There are seven roosters in that 40 acres and he points them all. The reason I know there were not eight is because he did not find eight.

He courses the field as if in a mad slalom, a giant, seven-legged Z—a canine Zorro, slashing innumerable smaller Z's with seeming abandon—reckless, until the moment, the point of truth with each bird, when he locks up solid, sometimes almost pitching forward in a somersault, so sudden is his stop—his hind legs and bony rear end almost piling up over his front legs, or swinging like a jack-knifed trailer way out around in front of him.

The birds hold; then they flush. We fire, and miss. We miss and miss, and it doesn't matter. In bird hunting, one piece of bliss—one little window of dog perfection, one wedge of success, 30 seconds of grace, is enough to obliterate all the errors of a lifetime—either yours, or the dog's.

By the bottom of the hill, Colter is trembling as he points, locked up on that seventh rooster. Streams of snow-white slobber trail from his jowls, fleck his face. My dog; I'm so tired of letting him down.

The rooster flushes, flares left; I swing and shoot and keep swinging, and the bird tumbles almost inexplicably—so unaccustomed am I to this result—to the ground, a small cloud of feathers floating above him, marking his descent. Colter rushes over to the bird—we can see its copper and black feathers sticking up out of the brush where he has crash-landed—and sinks his inch-long fangs into the dead bird's breast and begins shaking the bird like a rat terrier, making more feathers fly. I hurry over and take the bird from him and pat him.

Tim and Tom are cheering, as happy for Colter as I am, and they come over to congratulate us, as if we have done something difficult, not simple: not blood-earth simple.

If the bird had flared right, Tim would have hit it.

A night of celebration. The three dogs wrestling on the bed, playing like puppies: aging mother, her young son Colter, and the elegant, peak-of-her-prime Maddie: three dogs writhing, yipping, panting, grinning—pouncing on one another and playing tag.

The weather report says there's still a blizzard going on, back up over the other side of the Divide—back in the dark woods.

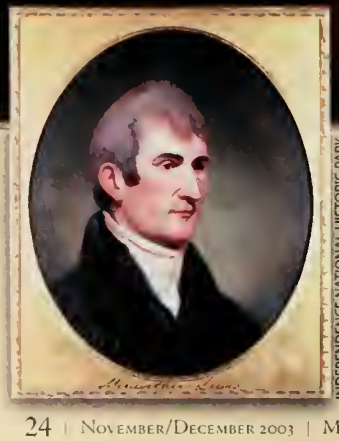
The freezer is full of Tom's birds. There are pretty feathers everywhere; the dogs have ripped into the paper bag full of them that we have saved to take back home, to show our people what pheasants look like. Feathers on the tips of the dogs' noses, feathers all over their backs, all over the room.

The last day is even colder and more brilliant. Hoarfrost falling through the sky, sparkling in the midday sun.

Midday, Maddie runs a rooster zigging and zagging through the covert; the bird erupts, flies right past Tim, and he fires and drops it: Maddie retrieves it. Tim is smiling, as quiet, as she brings it in to him, as I was exultant, yesterday—but I know he is feeling the exact way, inside: the very same.

We hunt almost all the rest of the day, in that sun-glittery cold, stopping to marvel at the scenery often. When the dogs' vertebrae begin showing, we turn around and go back home, back across the prairie and up and over the pass, back into the heart of winter; but our blood is filled, once more, with sunlight and magic.

Rick Bass, who lives in Montana's Yaak Valley, is the author of 17 books of fiction and nonfiction. Stan Fellows, of Iowa City, Iowa, has illustrated articles in Atlantic Monthly, Field & Stream, *and* Harper's.



INDEPENDENCE NATIONAL HISTORIC PARK

AERIAL VIEW OF MISSOURI HEADWATERS STATE PARK / BY CHUCK HANEY

Tracing Lewis and Clark through Montana's State Parks

At these historic state sites, visitors can see what the expedition members saw and learn what further adventures awaited them around the bend

By Ellen Baumler

During the summers of 1805 and 1806, the natural kaleidoscope of what is today Montana spread its ever-shifting, multi-hued frames before the men of the Lewis and Clark Expedition. Moving through this region on their route to and from the Pacific Ocean, the Corps of Discovery came upon vast natural wonders, reached the source of the Missouri River, and met various tribes of Indians who contributed to the journey's success.

Modern-day travelers looking to retrace the explorers' steps need venture no further than Montana's state parks system. There,

INDEPENDENCE NATIONAL HISTORIC PARK

STEVEN AKRE

visitors can learn from interpretive specialists about the many hardships endured by the Corps, view river valleys and plains little changed from two centuries ago, and gain a richer understanding of the expedition's significance—both to the nation's westward expansion and the Indian people who populated the region for centuries before Lewis and Clark arrived.

Giant Sptings State Park makes an excellent starting point for a 21st-century tour of Lewis and Clark's travel sites. Here, massive springs gush forth in a lush, oasis-like setting on the east bank of the Missouri River, just outside of Great Falls. Within a few miles of the springs are five waterfalls that delayed the expedition's journey (forcing an 18-mile portage) and for years afterwards defined the upstream navigational endpoint of the Missouri at Fort Benton. Today four of the falls are dammed, harnessed for hydroelectric power; only Crooked Falls remains similar to what the men of the expedition saw.

Giant Springs itself is also largely unchanged. Lewis and Clark were the first to record these freshwater springs, some of world's largest. They bubble forth as cold and clear today as they did on June 18, 1805, when William Clark came upon "...the largest fountain or Spring I ever Saw," which "...boils up from under the rocks near the edge of the river."

Meriwether Lewis, too, was amazed when he first visited the springs, noting in the expedition's journals that "the water of this fountain is extremely transparent and cold; nor is it impregnated with lime or any other extraneous matter."

Giant Springs produces so much water—156 million gallons each day—that the 58 feet from there to the Missouri is considered a river in itself (the North Fork Roe River, as it is called, has been recognized in the *Guinness Book of World Records* as the shortest river in the world).

"That abundant output," says park manager Dan Smith, "is why it's not just called Big Springs but *Giant* Springs." The springs are so important and impressive they make up part of the Great Falls Portage National Historic Landmark.

The aquamarine waters that today enthrall visitors at the park could have been rain that fell when the Corps of Discovery passed through. Carbon dating, according to some experts, suggests that the spring water has been underground for 3,000 years before it emerges again to the light. Others scientists more cautiously say it takes just a century for the water to filter through underground fissures 600 feet deep in Madison limestone before reaching the surface.

The 830-acre Giant Springs State Park is home to mule deer, foxes, and coyotes, and it's a bird watcher's paradise besides. In what is now the Great Falls area, Lewis saw and recorded brown-headed cowbirds, common nighthawks, turtle doves, pigeons, sharp-tailed grouse, and long-billed curlews. It was in this vicinity that he first saw and described the yellow-breasted western meadowlark, which later became Montana's state bird.

According to Smith, a visitor can learn as much about the Lewis and Clark journey at this state park as anywhere else along the explorers' route. In addition to the famous springs and historic interpretive displays, the park has 9 miles of trails that likely follow portions of the actual paths taken by Lewis and Clark. Visitors will also want to stop by the Lewis and Clark National Historic Trail Interpretive Center, located within park property near the entrance. The center is packed with engaging interpretive displays that provide a memorable glimpse into the early 19th-century adventure.

From Great Falls, a visitor can follow the same route the Corps took up the Missouri. Interstate 15 parallels the river for 50 miles before veering off at the canyon Lewis dubbed the "Gates of the Mountains." Farther upstream from that site, on July 21, Lewis and most of the men paddled their eight heavily laden dugout canoes into what is now Townsend Valley, south of Helena. Both Lewis and Sergeant Patrick Gass noted in their journals the stunning crimson bluffs outside present-day Townsend. As the party continued south, Clark mapped the area and later penned a name for a group of islands, calling them "Yorks 8 Islands" after his

Ellen Baumler is a writer and interpretive historian at the Montana Historical Society.

CRAIG & UZ LARCOM

PHIL FARNES

PAUL F UPDIKE

WATER PARKS Corps members made their journey mostly by water, an element visitors will find in abundance at many state sites commemorating the expedition. Far and above left: Visitors at Giant Springs State Park can see the same pristine waters that so impressed Captains Clark and Lewis. At York's Islands (left), an angler fishes where Corps members paddled as they made their way upstream to what is today Missouri Headwaters State Park (above).

slave (who was also a childhood companion and gun-carrying, full-fledged member of the expedition).

Troy Helmick, of the Crimson Bluffs Chapter of the Lewis and Clark Trail Heritage Foundation, says that Clark's cartography uncannily matches modern-day maps. "It's remarkable how he could have drawn it just having passed by there," Helmick notes. Visitors can view what are now called York's Islands at an FWP fishing access site off U.S. Highway 287 south of Townsend.

Soon after leaving the islands, the Corps of Discovery reached the three rivers that join to form the Missouri River, one of the goals set forth by President Thomas Jefferson (the primary goal was to find the Northwest Passage that would link, by water, the East Coast to the West). On July 27, 1805, Meriwether Lewis climbed a limestone cliff overlooking the sweeping plains and meadows ringed by lofty mountains. There, at what is today Missouri Headwaters State Park, he looked down on what he later described as "an essential point in the geography of this western part of the Continent." He and Clark agreed to name the three rivers the Jefferson, the Gallatin, and the Madison, after President Thomas Jefferson, Treasury Secretary Albert Gallatin, and Secretary of State James Madison.

The Corps made several other less spectacular finds at the Missouri headwaters. Lewis noted a new kind of black gooseberry, needle and thread grass, and globe cactus. Captain Clark commented on the great quantity and variety of mountain currants and other berries. Sandhill cranes live in the wet meadows along the rivers, and the Corps captured a live specimen while camped there.

Though the captains gave the three rivers their English names, the waters had long been named by the Crow Indians, and the Salish already called the area "The Place of Many Rivers." Dyani Bingham, who is of Blackfeet, Assiniboine, and Metis Indian descent, points out that much of what the expedition "discovered" had in fact been long known to Native Americans along the route.

"It was a voyage of discovery only for expedition members and Americans back East," says Bingham, coordinator for the Montana Tribal Tourism Alliance. "But for the people already living here, Lewis and Clark didn't find anything new at all."

Archeological research has shown that Indians had been visiting the headwaters area for hundreds—perhaps thousands—of years before the expedition arrived. They made tools from stone quarried from an ancient site a short distance downstream from the three forks of the Missouri. Pacific shells and exotic obsidian found in the area indicate early prehistoric trade over a surprisingly wide geographic area. Familiar to generations of Crow, Blackfeet, Salish, Nez Perce, Shoshone, and other tribes, the three forks area was an ancient meeting place for Indian hunting parties and also for early European trappers. Its strategic location made the area highly contested and a place of enduring conflict.

It was there, five years before the expedition arrived, that a Hidatsa raiding party came upon Sacagawea's people, killed a number of them, and took the rest prisoner—including the young woman who later acted as an interpreter for the Corps.

The site has further significance. After the expedition, Corps members John Colter and John Potts returned to the headwaters area to trap beaver. A band of Blackfeet attacked the pair in retaliation for a previous skirmish in which Colter sided with the Crows against the Blackfeet. They killed Potts outright but allowed Colter a chance, though slim, to survive. They stripped him naked, took his weapons, and gave him a 200-yard head start. Colter's five-mile run to safety that began at the headwaters is one of Montana's best-known stories.

Missouri Headwaters State Park was established in 1947 to protect the site where these and other historic episodes took place. The park is part of a larger designated National Historic Landmark, significant for its strategic location, long history to Indians, and importance in the Lewis and Clark Expedition.

The 560-acre state park comprises the lowlands where the rivers join. It offers picnic sites, a small campground, and hiking trails but is otherwise undeveloped, providing a sense of what conditions were like when the expedition camped here July 27–30, 1805.

To help visitors understand the site's significance, FWP has provided interpretive signs, an on-site interpretive specialist, and

W. STEVE SHERMAN

FAMILIAR FACE Beaverhead Rock State Park, near Twin Bridges, commemorates and conserves the landmark that Sacagawea recognized as part of her home territory.

audio recordings that tell the stories of Indians, settlers, and Corps members who lived there or traveled through the area.

The Indian perspective is one that park manager Ray Heagney urges visitors to acknowledge and understand. "This site is a tapestry of Native American cultures," he says. "Over hundreds of years, dozens of tribes and bands camped here, hunted here, and fought here."

Heagney says learning about Lewis and Clark's historic visit to the headwaters can spark interest among park visitors into other historic travels. "There are plenty of spirits at Headwaters," he says. "And what you can learn from Lewis and Clark is that there is much more to the story."

From the Missouri River headwaters, the Corps carried on south up the Jefferson to the Beaverhead River, where another state park is today located. On August 8, 1805, Sacagawea recognized her home by the landmark Beaverhead Rock, and the Corps hoped to soon meet members of her tribe. Visitors driving along Highway 41 between Twin Bridges and Dillon can't miss this natural rock formation (now Beaverhead Rock State Park), which looks like the head of a swimming beaver.

A few days later, Clark climbed a high hill nearby, took compass readings, and sketched a map of the Beaverhead Valley. That point, at what is today Clark's Lookout State Park, is one of the few places visitors can be certain they are standing exactly where a member of the Corps once stood.

From here, the expedition crossed the Continental Divide at Lemhi Pass and then headed to the Bitterroot River, which flows north near the Montana–Idaho border. Travelers today can drive along roughly the same route, which passes through some of Montana's most scenic mountains and valleys, and within a few hours arrive at one of the rare sites where there is evidence of the expedition's stay.

Though Lewis sent many animals, plants, and other specimens to Jefferson during the journey, and the Corps returned with a variety of items, expedition members left surprisingly little evidence of their travels on the trail. One exception is at Travelers' Rest State Park, 15 miles south of Missoula. Here, archeologists have recently made discoveries that appear to verify the location of one expedition campsite used by the Corps both to and from the Pacific Ocean.

"Lewis and Clark's discoveries were remarkable," says Ken Soderberg, an FWP Parks Division official in Helena, "but it's also remarkable what archeologists have discovered about the Lewis and Clark journey, especially at Travelers' Rest."

Soderberg explains that scientists have used a combination of archeology, modern technology, and old-fashioned sleuthing to find out where the expedition camped before heading over Lolo Pass and entering what is now Idaho.

In 2002, archeologists studied Lewis's journals and the expedition's military procedures manual to find the location of the campsite. The manual contains diagrams of standard campsite "floor plans," which they compared to those uncovered at the site. That's how they were able to figure out where various party members camped, cooked, and even built a latrine.

Further confirming the site's historic authenticity, archeologists found molten lead deposits they traced back to a foundry in Kentucky in operation at the time of the expedition. They also uncovered a single trade bead similar to one noted in expedition records, and they found a

NORMAN JACOBSON

NELSON KENTER

clothing button from the early 1800s.

The scatological evidence uncovered at the site was especially intriguing to scientists. Using a vapor mercury analyzer, they were able to detect significant levels of mercury, an element that does not decompose, at a latrine uncovered at the site. The men of the Corps were known to have taken mercury-laden pills for various physical infirmities. The strong purgative produced immediate, long-lasting diarrhea. The expedition's journals mention that three men were ill while the Corps camped at Travelers' Rest on the return in 1806.

The combined evidence is enough to lead some Lewis and Clark historians to conclude that this new site, and not the previously designated National Historic Landmark site a few miles to the north, was where the expedition actually camped.

Travelers' Rest State Park is one of the most historically significant but least developed of Montana's state parks. Visitors today will find a picnic site, information kiosk, and hiking path, but little else is different from when the Corps passed through. People often ask park manager Loren Flynn when an interpretive center will be built at Travelers' Rest.

"It's already built," he answers. "The land itself tells the story."

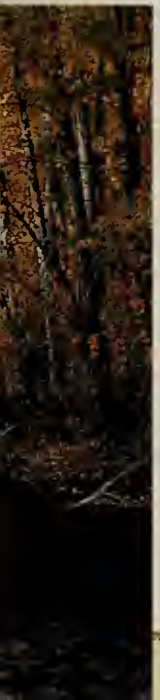
Flynn is executive director of the Travelers' Rest Preservation and Heritage Association, which manages the park. Like other state park managers across Montana, he's careful not to let Lewis and Clark's expedition overshadow the much longer Native American history, especially that of the Salish people, who consider the area their ancestral homelands.

According to Dr. Stan Wilmoth, state archeologist of the Montana Historical Society's State Historic Preservation Office, Travelers' Rest is significant as a "celebrated pause by the expedition, where archeology has identified its footprint." But, he adds, "in a broader sense, it is a natural and cultural landscape whose importance reaches from time immemorial to the present day."

After leaving Travelers' Rest on September 11, expedition members faced many additional hardships, almost starving in the snow-covered Bitterroot Mountains as they continued their journey west. The following spring, after spending the winter on the Oregon coast at the mouth of the Columbia River, they would come this way again, eager to return home and report what they had found on their extraordinary 3,700-mile journey.

During the next few years, in commemoration of the expedition's bicentennial, many people hope to see for themselves what Lewis and Clark witnessed two centuries before. Montana state parks established at important Corps of Discovery sites provide just such an opportunity for discovery. There visitors can see Montana much as the explorers did. And they will learn why these heroic adventurers continue to, in the words of the late historian, author, and Helena resident Stephen Ambrose, "provide us with a sense of national unity that transcends time, and distance, and place, and brings us together from coast to coast."

REST OF THE STORY An interpreter at Travelers' Rest State Park demonstrates how Lewis and Clark may have used a sextant to find their way by the stars. Camp equipment replicas at the park (below right) provide a sense of what life in the Corps must have been like. Lolo Creek (below left) is little changed today from when expedition members passed it after leaving Travelers' Rest into what is now Idaho.



DEA VOGEL

Along the way

Several other FWP-managed sites near the route outlined here can further enhance a visitor's Lewis and Clark experience.

On May 25, 1805, along the Judith River, Meriwether Lewis came upon "the remains of a vast many mangled carcasses of Buffalow which had been driven over a precipice" and wrote of the buffalo jump in detail. Though there is no state park at that particular site, Ulm Pishkun State Park, a few miles west of Great Falls, contains a new interpretive center that explains the importance of buffalo jumps, called "pishkuns," to American Indians.

Another way to gain insight into the expedition is to fish, canoe, or hike along the same rivers members did. FWP Parks Division manages dozens of fishing access sites along the Missouri, Yellowstone, Jefferson, Beaverhead, Big Hole, Bitterroot, and other rivers traveled by Corps members.

LEWIS AND CLARK CAVERNS BY CRAIG S. LUZ LASICOM

For 10,000 years the Blackfoot River, known to the Nez Perce as "The River of the Road to Buffalo," served as a corridor between the Great Plains and the lands west of the Continental Divide. Lewis took note that beaver were abundant there and traveled through the valley on his return voyage. Along this lovely river are 17 fishing access sites where the scenery is as magnificent as what the captain beheld on his journey east.

For a sense of what the expedition's Yellowstone River return trip was like, stop by Pirogue Island State Park, near Miles City. Covered by tall cottonwoods that may have been saplings when the Corps passed by, the island is home to eagles, waterfowl, and deer, and it provides river views unspoiled by modern structures.

No story on Lewis and Clark and Montana's state parks would be complete without mention of Lewis and Clark Caverns State Park, near Three Forks. Because the hardy explorers spent so much time in the state, many places bear their names—including some they never visited, such as this underground state park. The caverns were first reported in 1903, when prospector D. A. Morrison saw an eagle fly into a hole in the hillside. Named after the explorers because the entrance overlooks the Lewis and Clark Trail along the Jefferson River, the natural cathedral-like caverns are larger than any in the Northwest.

A PLACE TO HUNT

PHOTO ESSAY BY DALE C. SPARTAS

I grew up out East, and the places I used to hunt when I was a kid are all gone now, developed and turned into housing and shopping malls and golf courses. What Montana has with its Block Management Program is incredibly valuable, because it provides people with a place to hunt—*lots* of places to hunt—while giving something back to the landowner.

WEINGARTNER RANCH
Block Management Area
\ Walk-in Hunting
\ No permission required
\ All hunters must sign in at roster box at the property in Long Gulch.
BLOCK

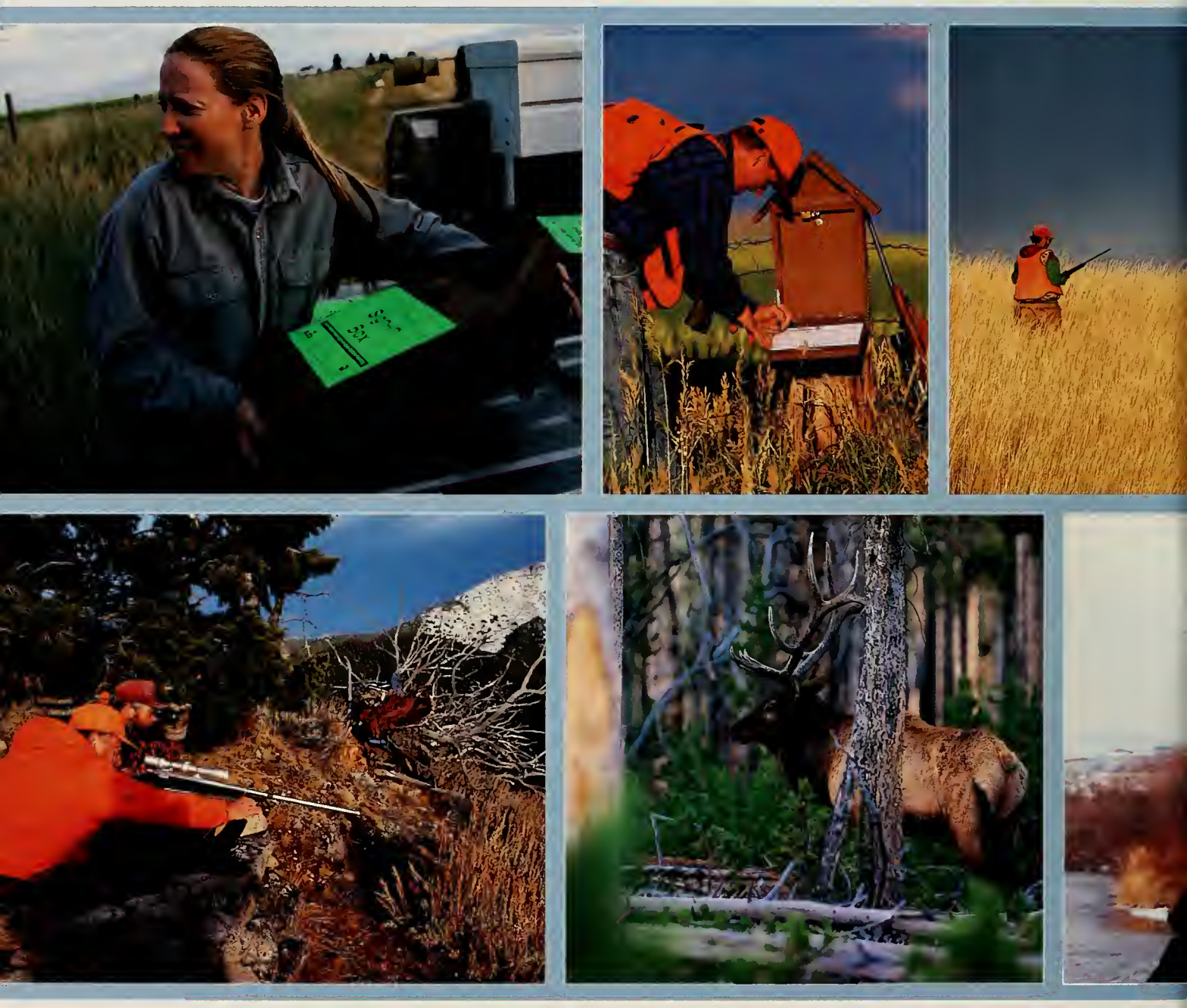
These are photographs I've taken over the years of block management areas, hunters on BMAs, and block management cooperators. I hope that by looking at these images, people will see why this program is so important for preserving Montana's hunting heritage.

—DCS

◂ Hunter Mike Ross, rancher Daryl Stutterheim, and FWP regional block management coordinator Coleen O'Rourke discuss which areas of Stutterheim's ranch are open to public hunting.

▲ Block management opens more than 8.5 million acres of private property and isolated public land to free public hunting for deer, elk, antelope, upland birds, and more.

▼ FWP helps landowners manage public hunting on property enrolled as block management areas. Department staff install hunter sign-in boxes and help mark BMA boundaries. They also provide landowners with signs, permission books, and area maps, and they give hunters information on ranch rules and provide maps showing area boundaries. On some BMAs, hunters administer their own permission, allowing the landowner to tend to chores. On others, hunters need to get permission directly from the landowner.



▲ Many block management areas also offer big game hunting opportunities for elk and other animals moving out of higher mountain country ahead of winter storms. Whether it's in the mountains or grasslands, wetlands or foothills, the Block Management Program provides hunting access for thousands of hunters each year. Use the program like a menu to sample the type of hunting experience you want–and then get out there!

▼ Montana's prairies and croplands offer hunters a wide variety of block management hunting opportunities for pheasants, sharptails, and other upland birds.

▲ Waterfowlers and others who pursue game along rivers will find more riparian block management areas than they could hunt in a lifetime.

BLOCK MANAGEMENT

▶ A major goal of the Block Management Program is to preserve Montana's hunting heritage by providing residents and visitors, young and old, with a place to hunt.

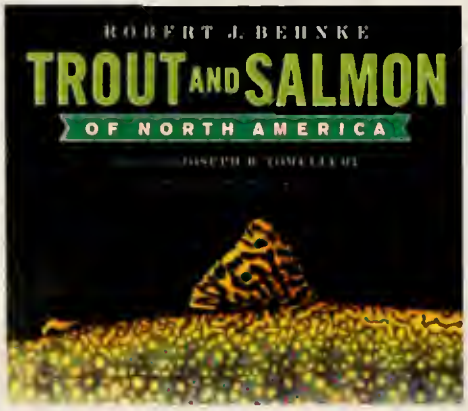
A Good Life Wasted: Twenty Years as a Fishing Guide. *Dave Ames. Guilford, Conn.: The Lyons Press. 2003. 249 pp. Hardcover. $24.95*

It's hard to say whether this is a cautionary tale or an invitation to apply for your guide's license, but Helena resident Dave Ames's engaging new book provides insight into a life both off-putting and appealing.

The author of *True Love and the Woolly Bugger*, Ames is a man who spends more time on the water each year than most of us do in a lifetime. Here he tells the story of leaving his job as a federal hydrologist (not enough time to fish) and lying his way to become a trout fishing guide. Untangling leaders, bouncing checks, and trying to remember the names of new clients are some of the hazards that come with a life taking trout anglers to some of Montana's best waters. The perks are self-explanatory.

Trout and Salmon of North America. *Robert J. Behnke. New York, New York: The Free Press. 2002. 359 pp. Hardcover. $40.*

One truism about trout, salmon, and other fish is that few people ever really see them. They are, after all, underwater, and even an angler catches only a momentary glimpse of a live fish before quickly releasing it unharmed or knocking it on the head. In this impressive volume, Robert J. Behnke takes us descriptively underwater to understand the phenomenally diverse world of this continent's many salmonids. His book describes 100 different trout and salmon species, ranging from the obscure but native Poison Creek redband trout of the Malheur Basin, found only in southern Oregon, to the common brown trout, imported to North America from Germany in 1880 and now swimming in most states.



Professor emeritus of fisheries and conservation at Colorado State University, Behnke is regarded as one of the nation's leading authorities on salmonids. The exquisitely rendered illustrations by Joseph Tomelleri, considered the Rembrandt of fish artists, display a diversity of shape, color, and detail unmatched by those in any salmonid book we've seen.

Heart Shots: Women Write About Hunting. *Edited by Mary Zeiss Stange. Mechanicsburg, Penn.: Stackpole Books. 2003. 382 pp. Hardcover. $24.95.*

Though only 9 percent of hunters nationwide are women, their sheer numbers—more than one million—indicate that hunting is not strictly a male pursuit. The same is true about hunting literature. In this collection of essays and stories, editor Mary Zeiss Stange gives voice to a century of women hunters who write. A hunter, Montana rancher, and professor of religion and women's studies at Skidmore College in New York, Zeiss Stange writes and lectures on the similarities and differences between male and female hunters. In *Heart Shots*, she combines classic tales of adventure, such as Isabel Savory's 1900 "Tiger-Shooting" with modern-day reflections on trophy hunts, like Townsend writer Eileen Clarke's 2000 account of hunting Namibia gemsbok and kudu with a German guide.

Montana: Wildlife Portfolio *Donald M. Jones. Helena, Mont.: Farcountry Press. 2003. 120 pp. Hardcover. $24.95.*

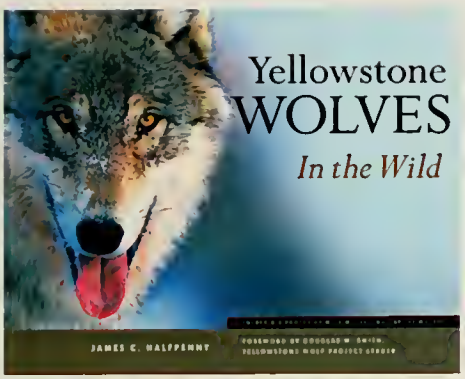
There's an image in this new book by Don Jones that sums up the photographer's artistic and technical mastery. A great gray owl, North America's largest, is flying straight at the viewer, wings outstretched; its eyes, as sharply in focus as if it were sitting on your kitchen table, stare into yours. It's an image so arresting you can't help but wonder if it's staged. But it isn't. Jones is well known among magazine art directors for his adherence to a self-imposed rule of taking photographs only of animals in the wild, which makes his images all the more remarkable. How he can get closeups of mountain lions, gray wolves, grizzlies, and more is a tribute not only to his talent as a photographer but also as an accomplished woodsman. Jones is a photographer "maddeningly patient," in the words of neighbor Rick Bass (who writes the book's forward), in his pursuit of the wildness in wildlife.

Rooster! A Tribute to Pheasant Hunting in North America. *Dale C. Spartas. Bozeman, Mont.: DCS Publishing. 2003. 122 pp. Hardcover. $50.*

This handsomely illustrated book celebrates everything pheasant related—the dogs, the hunters, the conservation efforts, and, of course, the birds themselves. Spartas says that while researching this book he shot a few roosters, but more importantly he witnessed firsthand the dedication and intensity of those who've worked for 20 years to restore this great game bird. In addition to Spartas's lovely photographs, *Rooster!* includes essays about Midwestern pheasant hunting from some of the region's top outdoors writers.

Hunting Labs. *Denver Bryan and E. Donnall Thomas. Minocqua, Wisc.: Willow Creek Press. 2003. 96 pp. Hardcover. $24.50.*

Bozeman wildlife photographer Denver Bryan is to Labrador retrievers what Annie Lebowitz is to New York celebrities. His new book won't disappoint fans of the stalwart breed. Paired with the clean, clear prose of Lewistown author E. Donnall Thomas, Bryan's gorgeous images depict a breed both alert and relaxed, eager to please but determined to get the job done, no matter what. What Bryan does best is capture, usually in the animal's eyes, the hunting dog's essence—the trusting purposefulness that makes it both your best tool and your best friend.



Yellowstone Wolves In the Wild. *James C. Halfpenny. Helena, Mont.: Riverbend Publishing. 2003. 98 pp. Softcover. $19.95*

Ever since they were reintroduced to the national park in 1995–96, Yellowstone's gray wolves have fascinated both those who love and those who despise these captivating canines. In this beautifully illustrated volume, which contains photos of wild wolves only, scientist and educator James C. Halfpenny tells the story of the wolf's introduction, including recent research on the roughly 200 wolves now using the park. Much of the book focuses on the Lamar Valley's Druid Pack, the most widely known group of wolves in the world.

The illustrative photographs, several of which first appeared in *Montana Outdoors*, document the beauty, hardship, and violence of the wolves' world.

Fly Fishing Montana's Missouri River. *Trapper Badovinac. Helena, Mont.: Farcountry Press. 2003. 120 pp. Hardcover. $24.95.*

"A lot of guides around here are mad because they say I revealed all the secrets," says fishing guide and photographer Trapper Badovinac about his new fishing book. "But if so many people already know these secrets, how can they be secrets?"

His Missouri River colleagues may be cursing Badovinac's comprehensive new book, but trout anglers are poring through it with gratitude. A professional guide on the tailwater fishery for the past seven years, Badovinac isn't shy about telling readers not only when to fish and what fly to use, but also directions on how to reach some of the best water: "Of the numerous pull-offs and wading opportunities on this stretch," he writes, "one of the better ones is about 1.5 miles north of the Wolf Creek Bridge."

No wonder the other guides are mad.

Previously a commercial photographer, Badovinac illustrates his book with images that capture the stark beauty of what some anglers regard as the best dry fly rainbow trout fishing river in the United States.

The Founding Fish. *John McPhee. New York, New York: Farrar, Straus and Giroux. 2002. 358 pp. Hardcover. $25.*

The United States might never have been formed were it not for the Schuylkill River shad that sustained George Washington's starving troops at Valley Forge during the spring of 1778. That's just one of many historical nuggets John McPhee has dug up in this engaging tribute to a fish most of us will never catch.

A staff writer for *The New Yorker*, author of 26 books, and winner of the 1999 Pulitzer Prize for nonfiction, McPhee has written about canoes, geology, Alaska, and more, but never before has he revealed such a personal passion for his topic. He's crazy about shad—sort of the steelhead of the Atlantic Coast—and shad fishing.

The book begins with McPhee's nearly three-hour battle with a shad weighing less than five pounds and ends with recipes for baked planked shad and shad roe. In between is pretty much everything worth knowing about these phenomenally strong fish and their long history with the residents of the Eastern Seaboard.

At the River's Edge: Lessons Learned in a Life of Fly Fishing. *Jerry Kustich. Grand Island, New York: West River Publishing. 2001. 215 pp. Hardcover. $22.95.*

Does Jerry Kustich have the best job in the world? When the soft-spoken angler isn't making bamboo rods for Winston Rod Company in Twin Bridges, he's driving across the United States promoting the company at trade shows, fishing for trout and steelhead, and talking to anglers about pollution, logging, irrigation, and other river conservation issues. In this collection of essays, Kustich invites readers to accompany him on a tour of his favorite waters, from New York's Niagara River to the Nanook River in the high Arctic. There we learn less about fishing than we do about Kustich, which is not a bad thing considering he's such an interesting fellow.

Mortal Stakes: Hunters and Hunting in Contemporary America. *Jan E. Dizard. Amherst, Mass.: University of Massachusetts Press. 2003. 312 pp. Softcover. $19.95.*

Each year millions of Americans, clad in orange or camouflage, enter forests, fields, and sloughs in pursuit of wild game. Until recently, there was little reason to explain why we do this. But beginning in the mid-20th century, hunting lost much of its utilitarian purpose and became more a ritual connecting increasingly modernized men and women to their agrarian and even primitive roots. Why hunters still choose to endure cold, sleeplessness, and physical hardship—and what that behavior means to contemporary America—is the subject of this scholarly work by Jan Dizard, a professor of American culrure at Amherst College. "I was curious about how men and women who have embraced an activity that many view as anachronistic think about their society and culture," Dizard writes. "Are they stuck in the past, caught in an eddy that keeps them from adopting more refined pursuits?" A hunter himself, Dizard interviewed dozens of hunters across the country to present an unflinching look at what it means to be a hunter—and an American.

2003 *MONTANA OUTDOORS* INDEX

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Past articles from 2002 and 2003 are also available on-line at: fwp.state.mt.us/mtoutdoors.

January/February

22nd annual *Montana Outdoors* photo issue. We celebrate in pictures the beauty and grandeur of Montana's landscapes, flora, fauna, and state parks.

March/April

Great Expectations. Warmwater anglers have high hopes for the state's walleye fisheries. Too high? *By Tom Dickson*

A Good Time in Montana's Badlands. Makoshika State Park provides a recreational feast in some of the state's strangest surroundings. *By Brett French*

Barely Afloat. Biologists race against time to keep Montana's majestic white sturgeon from disappearing. *By Ray Stout*

Full-Contact Birding. Bird watching: Have you got what it takes? *By Matt Flavin. Illustrations by Jeff Tolbert*

A Dam Improvement. It seemed impossible for trout anglers and hydropower facility owners to ever see eye to eye. Then came the Clark Fork Settlement Agreement...*By John Fraley and Joe DosSantos*

A Mustang Sally. Head for the Pryor Mountains to see wild descendants of Spanish horses brought here five centuries ago. *By Gary Beeler*

Our Point of View: A Passion for Hunting and Fishing

Montana Outdoors Report: State parks generate $100 million in local Montana communities; Montana's state color: blaze orange?; Zap goes the mayfly; *Crown of the Continent*; FWP cookbook; Saving water on the Jefferson

Montana Outdoors Portrait: Ponderosa Pine

Parting Shot: National Wildlife Refuges

May/June

Big (and Plentiful) Fish on the Prairie. Some anglers say there's no decent fishing east of Great Falls and Billings. Here are nine angling hotspots that say they're wrong (or lying). *By Andrew McKean*

Water, Water Everywhere. At Flathead Lake State Park, you can swim, snorkel, scuba-dive, sail, sea kayak, or just sit by the shore and let the waves lap your feet. *By David Madison*

Breakthrough at Milltown Dam? It appears likely this aging structure and its accumulated contaminants will finally be removed. *By Tom Dickson*

Fish Management Demystified. What FWP does to conserve Montana's fisheries and improve your fishing. *By Dave Hagengruber*

Wildflowers Photo Essay: A reminder of Montana's tiniest delights.

Keeping the Ribbon Blue. Faced with whirling disease and increased angling pressure, FWP biologists work to maintain the Missouri River's nationally renowned trout fishery. *By Bruce Auchly*

Our Point of View: Plans Must Address Habitat

Montana Outdoors Report: State's wolf management plan; Two state fish records fall; Ten years of teaching women confidence in the outdoors; FWP's *Field Guide to Montana Fishes*

State Parks Calendar: May–June 2003

Montana Outdoors Portrait: Clark's Nutcracker

Parting Shot: End of the Line

July/August

Cross Currents. Montana struggles to accommodate the growing number of river anglers, kayakers, and floaters. *By Tom Dickson*

Montana's Trophy Trees. How do your local trees measure up to these state champions? *By James Hagengruber. Photos by Tom Bauer*

Dry Beneath the Surface. It may be green and lush where you live, but Montana's drought continues to plague many fish and wildlife populations. *By Andrew McKean*

Spirit of the West. Montana's premier ghost town, Bannack State Park gives visitors a glimpse of the state's colorful frontier past. *By John Barrows*

Outlaw Introductions. When anglers illegally take fish management into their own hands, the results can be disastrous. *By David Madison*

A State Under Siege. Aquatic nuisance species are poised to invade Montana from every direction. What the state is doing to keep them at bay. *By Bernie Kuntz and Tom Dickson*

Our Point of View: What We Can Do about Elk Impacts

Montana Outdoors Report: FWP receives much legislative interest during 2003 session; How to let 'em go; Montana keeps watch on Arizona nonresident lawsuit; Hunting and fishing licenses now available on the Internet

State Parks Calendar: July–August 2003

Montana Outdoors Portrait: Long-toed Salamander

Parting Shot: Watch Your Back

September/October

Wildlife Management Demystified. A guide to how FWP conserves Montana's wildlife species and their habitats. *By Sam Curtis*

Where the Buffalo Fell. For hundreds of years, bison perished at this sacred site, giving life to Great Plains Indian tribes. *By Bruce Auchly*

The Gentle Art of Negotiating Hunting Access. Think of it as a job interview, only without the tie. *By Alan Charles*

So Far, So Good. Montana deer and elk tested negative for chronic wasting disease. Does that mean we can stop worrying? *By Tom Dickson*

Celebrating Ducks. Photo essay

Their Land, Our Wildlife. How conservation easements benefit the public's wildlife while maintaining private ranching traditions. *By Henry Gould*

Stream Protection Anniversaries. *By Tom Dickson*

Our Point of View: New Neighbors

Montana Outdoors Report: Montana's stream access law is upheld; Grayling suffering from heat; Find your way there; Explosive language; On-line field guide

Goodbye to Montana's Waterfowl Stamp

State Parks Calendar: Fall 2003

Montana Outdoors Portrait: American Dipper

Parting Shot: Leaning Lightly

November/December

The Elk Next Door. Why one person's prized (or profitable) elk can become another person's elk depredation problem. *By Tom Dickson*

A Montana Hunter in Bavaria. Could Germans teach us a thing or two about hunting? *By James Hagengruber*

My Brown Boy. Sunlight, magic, and pantherlike screams on the frozen plains of north-central Montana. *By Rick Bass. Illustrations by Stan Fellows*

Tracing Lewis and Clark Through Montana's State Parks. At these historic state sites, visitor can see what expedition members saw and learn what further adventures awaited them around the bend. *By Ellen Baumler*

A Place to Hunt. Block management photo essay. *By Dale C. Spartas*

Montana Outdoors Report: New law eliminates state park fees to Montana residents; Kalispell hunter education takes to the field; Experts say no ice is safe; Researchers monitor common loon population.

Our Point of View: Hunting for Different Reasons

Out Here: Incoming

Recommended Reading: Book Reviews.

2003 *Montana Outdoors* Index

Montana Outdoors Portrait: White-tailed Ptarmigan

Parting Shot: Gotcha!

White-tailed Ptarmigan
(Lagopus leucurus)

PHOTO BY TOM ULRICH

MORE THAN ANY OTHER grouse, ptarmigan seem unconcerned about humans. When approached, these birds rarely fly, and sometimes they will even let you watch as they feed their young.

I last saw white-tailed ptarmigan in late August at Upper Rumble Lake in the Swan Range, which at 8,000 feet is the highest northwestern Montana lake that supports fish. A hen softly hooted as she shuffled her chicks through the boulders and alpine flowers near the lakeshore. Later that day in the alpine meadows above the lake, my son and I watched as a flock of about ten ptarmigan hopped from snow patch to flower patch.

White-tailed ptarmigan have one of the most limited distributions of any watchable wildlife species in Montana, so they are not particularly easy to find. I've seen them only in the high country of the Swan Range, Jewel Basin, Glacier National Park, and the Great Bear Wilderness. I consider spotting one of these birds a kind of "viewing trophy."

APPEARANCE

The white-tailed ptarmigan is the only ptarmigan species found south of Canada. It's the smallest member of the grouse family in North America, averaging about a foot in length and weighing less than a pound. Unlike North America's other two ptarmigan species, the white-tailed ptarmigan has a white tail year-round, thus its scientific name, a Latinized version of the Greek *leukos* (white) and *oura* (tail.) The white-tailed ptarmigan is a mottled gray brown in the summer with a white tail, underside, and wings. In the fall, both sexes turn reddish brown before white feathers begin replacing the darker ones. By early winter, males and females are all white except for a black bill and eyes. Feathered legs and feet act as snowshoes so the bird can walk atop snow.

FOOD

In winter, white-tailed ptarmigan eat conifer needles and the buds and twigs of alders and alpine willows. During the summer, the birds eat the leaves and flowers of alpine plants as well as lichens, berries, seeds, and insects.

COURTSHIP AND REPRODUCTION

Male white-tailed ptarmigan maintain their breeding territories through aggressive displays. To ward off other males, they run stiffly at the intruder, while flaring their scarlet eye combs and cackling loudly.

White-tailed ptarmigan are one of the few monogamous species in the grouse family. In a study of reproduction in Glacier National Park, researcher David Benson found that the vigilant male forages alongside its mate in the open alpine environment, keeping her from breeding with other males. As a result, only three percent of chicks were born from breeding outside monogamous pairs.

Females breed at about one year of age and lay four to seven eggs. They build their nests in the alpine tundra away from the breeding area in a shallow depression lined with lichens, leaves, and grass. Incubation lasts about three weeks. After the chicks emerge in mid- to late July, the female and her brood rejoin the male.

HABITAT

A truly alpine bird, the white-tailed ptarmigan is found almost exclusively above timberline, summer and winter. In May and June, the birds breed in areas where water and willow shrubs are nearby. After the chicks hatch, the hen and her brood spend the summer in moist meadows containing lush vegetation and boulders.

The white-tailed ptarmigan's protective coloration keeps the birds hidden from predators, which are mainly golden eagles and other raptors. Ptarmigan also hide out among boulders, overhanging snowfields, and low shrubs.

STATUS IN MONTANA

In Montana, the white-tailed ptarmigan is found only in a few mountain ranges in the state's northwestern region. Due to its limited distribution, this native bird is classified as a species of special concern in Montana. Although it is also classified as a game bird, no hunting for the species is currently permitted. According to Jim Cross, a former FWP wildlife manager in northwestern Montana, ptarmigan occur in naturally low densities and will probably never reach huntable numbers. "Pursuing them with a camera is a great way to go," he says.

BY JOHN FRALEY
John Fraley is an FWP information officer at Kalispell.

GOTCHA!

The Labrador retriever is devoted, loyal, and amiable, good with kids and friendly to strangers. That is, unless you're a pheasant or duck. When on the scent of a downed rooster or breaking ice to nab a wounded bluebill, Labs display an aggressive singlemindedness that makes you wonder what happened to sweet ol' Cinder.

That's the great thing about most hunting dogs. During much of the year, they're simply the family pet, chasing sticks, chewing tennis balls, maybe barking at the UPS driver. Most days are spent napping in the corner, waking occasionally to eat, or lick a paw.

Then, in autumn, there comes a transformation. Ears perk up, eyes alight. Suddenly the scavenger who begs for scraps at the table becomes downright predatory. Gone are the slow Saturdays spent lazing in the backyard. It's time for business. There's scent to follow, Huns to point, geese to chase down and haul back to the blind. By the time the leaves have fallen, your house dog has become wolflike, ready to race with the pack, track down prey, and bring home the harvest.

It's a metamorphosis not unlike what many of us undergo this time of year.

Photo by Denver Bryan

Montana Outdoors November/December 2003
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